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ABSTRACT

This report describes current systems and procedures for certification in Denmark. An introduction makes brief reference to the characteristics of the general and vocational training systems. Section 1 addresses formulation and introduction of certificates, qualifications, and diplomas, including the relevant institutions, procedures, and distribution of powers. Three categories of youth training programs are discussed: vocational training, initial training as farmer, and initial social and health sector training. These adult training schemes are discussed: trade initial training, labor market training, further training, continuing training, and medium length and long educational programs. Section 2 deals with access to qualifications for each training scheme. It focuses on access to training, organization of training, and competence achieved. Section 3 deals with certification of qualifications--evaluation of qualifications and examination--for each training scheme. Section 4 addresses problems and trends in relation to vocational qualifications. Topics include the following: reorganization of the structure of teaching methods in the labor market training scheme, coordination of training schemes under the direction of two ministries, and revision of legislation concerning the control of universities and other institutions of higher learning. Contains 14 references. (YLB)

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Systems and procedures of certification of qualifications in Denmark

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Systems and procedures of certification of qualifications in Denmark

DTI/Arbejdsliv
Lothar Holek

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Systems and procedures for the certification of qualifications

National monographs

In the context of preparation by the social partners of a "joint opinion on occupational qualifications and certification" (adopted on 3 July 1992), the Centre has been asked to undertake comparative analysis of systems and procedures for certification currently being applied within the European Communities. The authors of the monographs on the national training systems, another area of CEDEFOP's work, and who are in an ideal position to acquire information, have for the most part been asked to carry out this work.

National reports have now been concluded in the original language and are currently being translated. We are pleased to present these in a new publication series

"CEDEFOP Panorama"

These may be obtained free of charge upon request from CEDEFOP.

In these publications the authors, after making brief reference to the characteristics of the general and vocational training systems in their countries, describe all aspects of how qualifications are certified:

- formulation and introduction of certificates, qualifications and diplomas: the relevant institutions, procedures, tripartite or joint consultation or decision-making commissions;
- access to qualifications: conditions, means, motives, channels;
- certification: aims, contents, means, procedures;
- usefulness, use, trends and problems.

To keep up to date with national situations which are in a constant state of flux, the Centre would be grateful for reader's comments.

Cross-reference reading of the twelve monographs to formulate a synthesis report and a summary table is being carried out by a European institute specialized in international comparison of education and vocational training systems.
This publication currently is being prepared.

Maria Pierret
July 1993

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Section 3 deals with:

- evaluation of qualifications
- examination

for each training scheme discussed in Section 1.

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Introduction

In the official usage of the Danish Ministry of Education (in laws and statutory orders), the term 'vocationally oriented training' is used for a training scheme which wholly or partially provides vocational training qualifications. However, in other material from Danish authorities this term also covers vocational preparatory training. The term is thus not defined in relation to the degree of vocational qualification - whether the qualification matches the level of vocational training qualifications or not. (It is apparent from various official material that this is not always the case).

The term 'training schemes providing vocational qualifications' is therefore used in the report for training schemes which provide vocational training qualifications in Denmark. They are training schemes which qualify a person to exercise a trade or profession and often also to be admitted to an add-on or advanced training scheme.

A distinction can be made in training schemes providing vocational qualifications between

I. Youth vocational training schemes, and
II. Training schemes providing vocational qualifications for adults

The division into training schemes for young people and for adults is applied officially in Denmark. However, the terms 'young people' and 'adults' are not clearly differentiated in this context. The age of majority is eighteen. But the general use of the terms youth and adult training schemes in Denmark is not related to an age definition. The reason for this may be that those aged eighteen and older may also start on a youth training scheme ('adult apprentices' is one of the designations used). In addition, many young people start on a training scheme which does not finish until they are eighteen or older.

Training schemes providing vocational qualifications for adults can be divided into the following categories:

- trade initial training schemes
- the 'labour-market training schemes'
- further training schemes
- continuing training schemes providing vocational qualifications and
- 'medium-length' and long educational programmes.

The highest qualifying level in the complete vocational training system is that of the long advanced educational programmes (often referred to abroad as 'higher education').

The term 'advanced' is applied in Denmark to four different categories of training schemes providing vocational qualifications. This term is not therefore unambiguous.

It will become apparent from the report that the term 'training' in current usage is far from unambiguous. On the contrary, training in Danish usage today means a period of qualification of a particular duration, regardless of whether a course lasting for one to two weeks or, for example, training as a doctor which normally lasts 6½ years is referred to!

Training schemes providing vocational qualifications come under the direction of three different ministries in Denmark:

- the Ministry of Education
- the Ministry of Labour
- the Ministry of Industry

In addition, supplementary vocationally oriented training activities which prepare for or contribute towards training schemes providing vocational qualifications are carried out under the direction of the Ministry of Culture (e.g. what are known as 'production schools')

Altogether, training is provided in Denmark for more than 2,000 vocational training qualifications (including a long list of specialisations within the various training schemes).

On page 8 a very broad overview is given of the distribution of

responsibilities between different bodies/institutions and of the control of the Danish vocational training system.

The ministries involved undertake their training functions either via a special department in the ministry (the Vocational Schools Department in the Ministry of Education) or via boards subordinate to the ministry (the Labour Market Board - AMS - for the Ministry of Labour and the Maritime Board for the Ministry of Industry).

The structure of the Danish vocational qualifications system is characterised by wide-ranging involvement of the labour-market parties via a system of party bodies. The parties are always represented at least at the consultative level. There can often be said to be genuine influence and genuine negotiating relations between the ministry and the labour-market organisations. Formally, however, decision-making authority is chiefly vested in the ministries.

Several **central councils** have been established with advisory and decision-making duties in relation to the ministries on key issues relating to their area of training. **Central** committees specific to the sector or training scheme have been established under these councils with advisory duties 'upwards', i.e. towards the council and ministry concerned.

In addition, there are **local** training committees for some categories of training, the duties of which largely consist in **adapting training** schemes to local needs and in contact between the local training institutions and the local labour market (this is particularly important with regard to the provision of work experience placements for the practical element of the training schemes).

A large proportion of the training institutions providing vocational qualifications have a statutory board. These boards - partly in collaboration with the director of the institution - are empowered to control **supply and demand** within the limits of their state grants. In addition they have responsibility or joint responsibility in relation to a number of training schemes for the **further development** of the training within their specialised field. The training institutions obviously also

have responsibility for carrying out the training and for conducting the tests.

The circumstances outlined above are presented in schematic form as model of the training system providing vocational qualifications in Denmark (see the figure on the next page).

The 'medium-length' and long advanced educational programmes have been omitted from this model, partly to avoid complicating it and partly because special rules and legislation apply to this part of the system.

A more detailed presentation of the distribution of powers and the control of the individual categories is given in the discussion of each individual training scheme in Section 1.

The training system providing vocational qualifications in Denmark
Main structure (excluding the post-upper secondary school training schemes)

Political control of training schemes, inc. initiatives for proposed legislation concerning training schemes.	Minister of Labour	Minister of Education and Research					Minister of Industry
Control on the basis of legislation and ministerial orders.	Labour Market Board (AMS)	Vocational School Department of Ministry of Education (ESA)					Maritime Board
The Central Councils: Influence and consultative functions of labour market parties.	Training Council	Vocational Training Council	Technician Council	Training Council	Agricultural Training Council (LUR)	Council for Social and Health Sector training schemes	Maritime Training Council
Central committees: Sector or training scheme-specific influencing and consultative functions	Train. comm. for semi-skill. worker + sector comm. / Train. comm. for skilled worker further train. + the trade further train. comm. / The advis. contact comm. + the trade comm.	The trade committees	Technician committees				Specific committees for the individual maritime training schemes
Regional decisions and influence						County Council in each county Joint Board in the county	
Adaptation of training to local/regional conditions	Boards and principals of AMU centres	Local training committees Boards of vocational training schools	Local training committees	Board of vocational schools		Training Council	
Execution of training schemes	AMU centres	Vocational schools (commercial schools, technical schools etc.	Vocational schools			County schools	State schools, and exercise ships / Self-owned schools
Examination						Training council and county schools	State-established examination boards
Certificate of vocational training qualification schemes	Course certificate of participation "with satisfactory result" or certificate	Certificate of apprenticeship	Training certificate				Maritime Trading Certificate

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Section 1

Training schemes providing vocational qualifications in Denmark

I Youth training schemes providing vocational qualifications

There are the following three categories of training schemes providing vocational qualifications for young people:

1. The 'vocational training schemes'
   (the term is misleading, a definition is given later in Section 1)

2. Initial training as farmer including associated add-on training schemes

3. The initial social and health sector training systems in the area of assistance, nursing and care.

All youth training schemes are the responsibility of the Ministry of Education.

If an age criterion is used exclusively, some of the **maritime training schemes** would be included with the youth training schemes providing vocational qualifications, particularly the ship's assistant training scheme which only requires completion of the ninth year of primary and lower secondary school (folkeskole).

There is, however, a major difference in educational objective which distinguishes the youth training schemes from the training schemes providing vocational qualifications for adults: as well as providing vocational training qualifications, all youth training schemes must also give **general qualifications**.

This is ensured by all youth training schemes having both subjects providing vocational qualifications and courses of training **and** subjects providing general qualifications. In addition, the youth training schemes are to give the trainees a **theoretical background** so that after completing

the training they can make better use of the opportunities for continuing training in their specialist field.

1 The 'vocational training schemes'

This term has become official with the latest amendment of the law relating to this type of youth training schemes:

By this is meant the **basic training schemes providing vocational qualifications which provide vocational training qualifications normally with only completed primary and lower secondary school as the requirement for right of admission.**

The term is official usage and legal terminology. It is used for official designation in legislation on this category of training:

"Law on vocational training schemes" of 5 April 1989 with associated Order no. 87: "Order on vocational training schemes" of 12 February 1990.

The only requirement for the statutory right of admission to these training schemes is completion of the ninth year of primary and lower secondary school. These 'vocational training schemes' thus do NOT designate all vocational training schemes in Denmark. The term does NOT cover all training schemes which provide vocational training qualifications - from general three to four year training schemes to university educational programmes.

The definition of the term in CEDEFOP's GIIT publication (1st edition 1987) is therefore totally misleading.

A similar deviation in terminology applies to what are referred to as the "labour-market training schemes" (see later in Section 1, II).

The essential features of the 'vocational training schemes' will be examined below.

Target group:

All who have 'fulfilled the duty of education under the Primary and Lower Secondary School Act' (official usage), i.e. all who have completed the ninth year of primary and lower secondary school.

Aims:

'Vocational training' is intended to:

- give vocational training qualifications, but additionally contribute towards the personal development of the trainees and their understanding of society,

- meet the needs of the labour market for vocational qualifications, by which is understood both vocational and general qualifications,

- be capable of adapting to developments in trade and industry and in society,

- provide the trainee with a foundation for continuing training.

The first/introductory element of vocational training is also intended to motivate the young people for training and give them genuine choices between different 'vocational training schemes'/specialisations.

Characteristics/structure of the training

Virtually all 'vocational training schemes' are **two-part training**, i.e. the training alternates between the work experience element in a firm and instruction in a vocational school.

The structure of the 'vocational training scheme' is intended to make it easier for the trainee to **change to a different specialisation** during the course of the training and in this way to **change training**.

The theoretical level in the 'vocational training scheme' makes it possible

for the trainee after the training has been completed directly to **continue with continuing training** of a vocationally qualifying or general and vocational preparatory nature (including the vocationally oriented **upper secondary-school educational programmes**).
A distinction is made between ministerially **approved** and (as yet) non-approved 'vocational training schemes' and training schemes conducted as part of training experiments (for later approval of the training scheme - after no more than two years).

The individual 'vocational training scheme' may vary in **trade profile** depending on the school where it is carried out, but the vocational training competence achieved on completion of the training must be the same with regard to the approved training schemes: each one of them must be carried out according to the Ministry's established aims and limitations laid down in a **Training Order for each individual training scheme**. These Orders stipulate among other things:

- The condition to be met for a 'vocational training scheme' to be implemented is a **training agreement** between the trainee and one or more firms. The **training agreement** must including work experience and school periods **including final examination, e.g. apprenticeship test**

- the work experience element is carried out according to special ministerial rules laid down according to the **stipulations of the trade committee** concerned. These rules indicate the aims to be attained via the work experience element of the training. They describe the areas of work and duties in which the trainee is to be trained

- provisions on the contact between vocational school, work-experience firm and the trainee to ensure that the work experience element and the school element supplement one another in an appropriate manner

- the work experience element can take place at several firms

- the general qualifying function of the training is ensured by the **optional subjects** in the school element being **identical to** the optional subjects of schools providing general education, and by the trainee

being able to choose **subjects preparing for tests**, e.g. subjects included in the upper secondary-school (gymnasium) educational programmes

- the school element of the training is specified with respect to location and distribution over the course of the training, including its total duration.

A distinction is made between the first and second school periods in the 'vocational training scheme'. The primary aim of the first period is an introduction to the training scheme and occupation. This period is intended among other things to provide motivation for and information on training.

However, some 'vocational training schemes' only have one school period, and in the case of some training schemes it depends on the trainee's educational background whether he can 'skip' the first school period.

A 'vocational training scheme' can normally be started either with the first school period or with work experience in the firm. Trainees who start with work experience avoid the first school period.

Duration:

Most approved 'vocational training schemes' last on average for between three and four years. The shortest lasts 1½ years, the longest 5½ years. On the other hand, the non-approved 'vocational training schemes' vary considerably more: from one month to five years!

There are at present 83 'vocational training schemes' in Denmark. The number can vary, as one of the tasks of the trade committees in the training system is to adapt these training schemes to developments in society and on the labour market. This means that they can develop new 'vocational training schemes' and merge or abolish such schemes.

In 1990, the intake to the 'vocational training schemes' was 54,000 trainees.

Deviations from the normal pattern of training:

The answer obviously depends on what is to be understood by the normal pattern in 'vocational training schemes'. The following notable deviations occur among the approved training schemes - which apply to the whole country - just as all legislation and all ministerial orders always apply to the country as a whole (with the exception of the Faeroes and Greenland):

- there is an industrial worker training scheme as approved 'vocational training'. It only lasts two years.

- beautician training only lasts two years

- a specialisation in the porcelain painter training scheme (blue painter) only lasts 1½ years

At the opposite end of the scale are the particularly long 'vocational training schemes':

- the computer engineer training scheme lasts 5 years,
- industrial engineering mechanic training lasts 5½ years

A deviation from the two-part training pattern is the data-processing assistant training scheme: its lasts three years, but there is no in-firm element. It is doubtful, however, whether the conclusion can be drawn from this that it does not have a work experience element either: the practical element takes place at the school itself as part of computer-science training on the computer systems.

As mentioned above, the trainee can continue directly with advanced training after completing the 'vocational training scheme':

The trainee has options for:

- advanced technician training
- advanced mercantile training,

- upper secondary-school education and
- several other training schemes on the basis of a completed 'vocational training scheme'

The distribution of powers between different bodies/institutions and the control of the 'vocational training schemes' is shown in **Table** 1 on the next page.

Table 1

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Education: youth training schemes providing vocational qualifications
	The 'Vocational Training Schemes' (initial vocational training schemes)
Minister of Education and Research:	Ensures via legislation, ministerial orders and in cooperation with the Vocational Training Council that vocational training schemes provide both general qualifications and vocational qualifications.
Representatives of Main Labour-Market Organisations: Representatives of Labour-Market Organisations:	On the Vocational Training Council. The trade committees, the local training committees, on the boards of governors of the vocational schools.
Central councils and committees (at national level) — Vocational Training Council:	The Minister nominates the Chairman. The Council has 24 members, of whom 8 from the Trades Union Confederation (LO) and 8 from the Danish Employers' Federation (DA). Advises the Minister of Education on training policy and the objectives and structure of vocational training schemes. Expresses opinions on approval of new vocational training schemes and training experiments (deviations from legislation).
The trade committees:	Has equal number of employer and employee representatives. These committees decide for the individual approved training schemes: - duration + structure, inc. distribution between school and practical training - aims of training scheme - practical training schemes - what basic subjects are to be included in the individual training scheme. Also: Adjustments to, new establishment or closing-down of vocational training schemes.
Local training committees:	Advise the vocational school on training schemes, foster cooperation between the vocational school and the local labour market.
Board of governors of vocational schools:	Constitutes the senior management of the school. Administers State block grants to the school. Decide, together with the local training committees, which of the vocational training schemes for which the school is approved it will offer and - together with the school manager - the detailed content of these training schemes.
Controlling powers:	
Control of content:	The Minister has established the aims + content of each individual training scheme via ministerial orders (at present 83 training schemes). The Minister ensures that vocational training schemes provide both general and vocational qualifications. The general qualification in the training scheme takes place via the selection of basic subjects (e.g. languages, mathematics, natural science). The central trade committees have selected/select basic subjects for each individual vocational training scheme within their subject area.
Control of supply:	The vocational training schemes are offered by schools approved by the Minister of Education. The schools are approved to be able to offer several training schemes and select for themselves which they wish to offer. In addition, each school can offer one non-approved training scheme, approval for which must, however, be given within two years. The Minister may, on the recommendation of the Vocational Training Council, permit others, including firms and institutions, to offer particular vocational training schemes. The Minister may, on the recommendation of the Vocational Council, limit admission to the school instruction of some training schemes - and thus to these training schemes themselves (at present this applies to 10 training schemes)
Control of demand: Decisions on admission to training:	Demand is controlled by law: In principle all who have completed at least nine years of primary and lower-secondary school (compulsory schooling) have right of admission. But the Minister may - in order to regulate the attendance of the training schemes according to employment opportunities for those who have been fully trained - limit admission to certain vocational training schemes. There has been an enormous shortage of work experience placements in firms. Teaching compensating for work experience placements has therefore been established by law.
Control of development:	The trade committees can reorganise, newly establish or where appropriate append vocational training schemes within their marginal subject area.
Legal responsibility for the awarding of vocational training qualifications:	The trade committees.

2 Initial training as skilled farmer and associated add-on training schemes:

There are four approved 'vocational training schemes' in the agricultural area (included among the 83 training schemes referred to in I.1.).

Distinct from this is the actual farmer training scheme which is distinguished from the 'vocational training schemes' firstly with regard to its statutory basis and secondly because this training is partly given at some thirty special schools around the country (in the past schools of agriculture). However, with effect from 1.1.1991 these schools have acquired the status of vocational schools. At the same time, responsibility for the farmer training schemes was transferred from the Ministry of Agriculture to the Ministry of Education.

All who have completed the ninth year of primary and lower secondary school have the right of admission to the initial training scheme as farmer. All who have undergone this initial training have right of admission to the associated add-on training schemes.
The statutory basis of the training schemes is the Agricultural Training Act of 6 June 1991.

Aims:

The aims of the initial training scheme are to:

- provide vocational qualification in agriculture - although not as independent farmer - and to qualify trainees for the associated advanced training scheme,
- contribute towards the personal development and understanding of society of the trainees.

The objectives of the add-on training schemes are to:

- provide vocational training qualification as independent farmer,
- qualify the trainee for the agricultural trade at an advanced level,
- quality the trainee for further advanced training.

Structure of the training schemes:

The training schemes are **two-part training**, so that school instruction and practical training complement one another within a coherent course of instruction with an introductory school period of eight weeks.

The basic training is a **youth training scheme**, i.e. its structure provides both vocational and general qualifications. It has the same subjects on a par with the 'vocational training schemes'. The general qualifying part of the basic training is thus equated with these training schemes.

Duration and scope:

The basic training lasts 3½ years, including a total of one year of school instruction, the add-on training periods lasting 16, 20 and 60 weeks.

The annual intake of trainees for the basic training scheme is approximately 2,500 and that for the add-on training schemes is around 1,000.

The distribution of powers and control with respect to training schemes for farmers are shown in **Table 2**.

Table 2

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Education: Youth training schemes providing vocational qualifications**
	Initial Agricultural Training and add-on training schemes:
Minister of Education and Research:	Ensures via legislation, ministerial orders and in cooperation with the Agricultural Training Council that basic agricultural training provides both general qualifications (broad youth training) and vocational qualifications. Appoints Agricultural Training Council and nominates the Chairman of the council.
Representation of agricultural organisations:	On Agricultural Training Council (LUR) and in some cases on boards of governors of agricultural schools.
Central councils and committees — Agricultural Training Council (LUR):	Advises the Minister of Education on questions relating to the structure of the training scheme and rules for the training scheme. The Council itself takes decisions with respect to work experience placement firms (approvals etc.) and rules on practical work placements. The Council consists of 8 representatives from 4 agricultural organizations and can be supplemented by representatives of agricultural employers' and employees' organisations.
Boards of governors of vocational schools (schools of agriculture):	These vocational schools are self-owning institutions with school boards of governors. The boards of governors organize the financial conditions of the school and the training schemes.
Controlling powers	
Control of content:	LUR makes recommendations to the Minister on subject areas, subject range, guide teaching time and assessment. The schools plan the instruction locally (there are no local training committees corresponding to those of the vocational training schemes).
Control of supply:	Controlled by law: All who have attend elementary school inc. 9th year (compulsory schooling) have the right of admission to initial training. At the local level the board of governors of the individual school establishes what instruction the school offers.
Control of demand:	The Minister may - on the recommendation of the LUR - establish rules on the intake of trainees by the schools.
Control of development:	The Minister of Education and the LUR are responsible for the (further) development of the agricultural training schemes.
Legal responsibility for awarding vocational training qualifications:	The vocational school.

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3 The basic Social and Health training schemes (SOS training schemes)

Young people and adults have right of access to these training schemes - depending on their qualifications and at what level of the training they wish to start.

Aims:

The initial training scheme is intended to qualify trainees to perform **elementary** assistance, nursing and care tasks within the **primary** social and health sectors.
The add-on training is intended to qualify trainees to perform basic assistance, nursing and care tasks independently within the **whole** social and health field.

Statutory basis:

The statutory basis for these training schemes is law no. 432 of 13 June 1990 on basic social and health training schemes in the area of assistance, nursing and care etc. and Ministry of Education Order no. 799 on this topic (dated 21 November 1990).

Structure and duration of the training schemes:

The training schemes take place at three levels and afterwards provide an opportunity to continue with advanced training within the social and health sector training schemes.

Trainees under the age of 18 who have only completed the ninth year of primary and lower-secondary school must first complete an entry year - a kind of preliminary training. Adults can skip the entry year.

The first level of training is a one-year trainee course. The second level lasts 1½ years. Both levels are two-part training with a total of one-third school instruction, consisting of compulsory subjects and optional subjects preparing for tests. The practical training altogether accounts for two-thirds of the training time and takes place at several work experience

sites for each trainee.

Sixteen new schools (corresponding to the county structure in Denmark) were stated with this training with effect from 1 January 1991.

The Ministry of Education has **centrally established aims and limitations** for these new training schemes. All other decisions fall within the **competence of the counties**, such as fixing the number of trainees, deciding on merit problems, financial management of the schools, the planning of training etc.

Recognition of individual qualifications:

Individual **merit** can be approved in relation to SOS training schemes, and a course of training lasting for a shorter time than the prescribed training can be organised in this connection - for people with relevant backgrounds/qualifications in assistance, nursing or care. The decision on this is taken in the individual counties, i.e. the assessment and recognition of merit and deviations in relation to training from the standard pattern **can vary between the counties.**

The SOS training schemes were first introduced in 1991, and the number of applicants far exceeded training capacity (approximately six to ten times!). In 1991 there was capacity for 6,000 trainees at the first level. On the other hand, the capacity for the entry year of approx. 1,200 trainee places was far from fully utilised with only 300 applicants.

The distribution of responsibilities between the Ministry of Education, counties and municipalities and employee organisations and the management of the SOS training schemes is shown in **Table 3.**

Table 3

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Education: Youth Training Schemes providing vocational qualifications
	Basic Social and Health Sector training schemes
Minister of Education and Research:	On the recommendation of the Council, the Minister lays down rules on these training schemes with respect to objectives, the relationship between practical training and school training, the specialised aims of the subjects in the training scheme and the weight given to the subjects within the total training time, requirements for practical training and assessment. The Minister of Education lays down the number of tests, appoints examiners for tests - particular the final tests - and lays down rules on the joint admission test for the advanced social and health sector training schemes.
Representatives of labour market organisations:	On the Council for the Social and Health Sector training schemes (representatives of 3 ministries and the board, of counties and primary municipalities and of the occupational organizations of those who have completed their training).
Central Councils: Council for Social and Health Sector Training Schemes	The Council monitors the annual intake and admission to both basic and continuing social and health sector training schemes. The Council makes recommendations to the Minister on rules relating to training, merits and deviations from rules in the context of experiments. The Council can express an option on all questions of significance to these training schemes.
At Regional level: County Council:	The County Council is the popularly elected administrative body of the county (region), consisting of representatives of the political parties. The County Council appoints a joint board for these training schemes. On the recommendation of the joint board on the training offered at the schools, the County Council lays down the financial frameworks for the individual schools.
County authorities:	Make school capacity available for all training schemes in this system.
Joint Board:	Submits proposals to the County Council on the number and location of schools, on training offered at the individual schools on the basis of regional conditions, proposes the overall coordination of trainee appointment (= intakes), including with a view to the planning of the practical training, approves school budgets and establishes principles for the intake of the municipal further social and health sector training schemes. The Joint Board consists of: representatives of the County Council, municipal councils in the county, representatives of trade organisations of those who have completed their training and of school managers.
Training Council concerning basic social and health sector training schemes:	Can decide on appeals over examination for the first part of training (entry year) and the initial training.
Training Council concerning the municipal advanced Social and Health Sector training schemes:	Can decide on appeals over examination on this training scheme.
Training institution:	The school manager has administrative, financial and educational responsibility towards the County Council (county administration). Draws up a training system according to the rules laid down by the Ministry - for approval by the Joint Board.
Controlling powers	
Control of content:	The Minister of Education lays down rules for the content of the training schemes including the relationship between work experience and school training, specialised aims for the individual subjects and the weight given to the subjects within the total training time.
Control of supply:	The municipal authorities establish the size of these training schemes on the basis of municipal needs. The Joint Board proposes the total coordination of trainee appointments in the county concerned.
Control of demand:	The municipal authorities determine the size of the training schemes according to their need for (this type of) fully training labour and according to departures (as a result of continuing training).
Control of development:	Undertaken centrally in the Ministry of Education and regionally in counties and primary municipalities.
Legal responsibility for awarding vocational training qualifications:	Ministry of Education.

II Training schemes providing vocational training for adults

1 Introduction

As in several European countries, employment has also the reduced the opportunities for young people in Denmark to start on a training scheme providing vocational qualifications. In Denmark there is a residual group of young people who do not receive training that provides vocational qualifications. A number of course and training measures have therefore been established under the direction of several ministries as preparation for training which provides vocational qualifications. However, these activities fall outside the scope of this report.

Most adults in Denmark have undergone training which provides vocational qualifications. A large proportion of the training schemes which provide vocational qualifications are therefore directed towards updating/refreshing training given earlier ('further training'). Another portion is directed towards deepening and further developing vocational training qualifications already attained (continuing training).

However, there is also a need for vocational qualifications for the residual group of adults without vocational training qualifications and the group of adults who because of circumstances on the labour market cannot use their vocational training qualifications.

This function is chiefly fulfilled in Denmark by the 'labour-market training schemes', and among these in particular the 'semi-skilled worker training schemes' which provide initial training with a view to vocational qualifications - often of short duration (see Section 1, II.2.)

At the other end of qualification levels are the 'higher' or long advanced educational programmes which normally require upper secondary-school education as a qualification for entry.

For historical and political reasons, the ministries under the direction of which training schemes providing vocational qualifications are carried out have overlapping functions or overlapping training programmes: the

responsibilities of the Ministry of Labour include 'labour-market training schemes', which chiefly consist of semi-skilled worker training schemes and programmes for the training of skilled workers of various categories. Training schemes providing vocational qualifications under the direction of the Ministry of Education comprise, in addition to the youth training schemes referred to earlier, several further and continuing training programmes and the 'medium-length' and long advanced educational programmes.

An examination of the target groups for the individual programmes shows that several programmes have several functions simultaneously. One of the programmes even has the character of initial training, further training and continuing training - all depending on the educational and training background of those taking part in the programme! But the official designation of the programme is 'Further training of farmers'.

The formal designation of several training programmes is thus deceptive or misleading with regard to their actual qualifying functions. An overview is therefore given of the qualification functions of a number of adult training schemes (see table below). The table only contains training schemes under the direction of the Ministry of Education.

As a consequence of the dual function of training schemes providing vocational qualifications, they cannot be discussed on the basis of an unambiguous classification into either further or continuing training schemes. They will therefore be discussed below according to their location in the ministries. The report thus deals with adult training schemes providing vocational qualifications:

- under the direction of the Ministry of Labour
- under the direction of the Ministry of Education
- under the direction of the Ministry of Industry.

Qualification functions of the adult training schemes providing vocational qualifications in the Ministry of Education

	Initial training	Continuing training	Further training
Advanced technician training		X	
Computer science training	X	X	
Market economist training	X	X	
Business academy training		X	
Open education	X	X	X
Further training of farmers	X	X	X
Further training cf. Law 271		X	X

2 Training schemes providing vocational training under the direction of the Ministry of Labour: The 'labour-market training schemes' (AMU training schemes):

Definition of term:

The term 'labour-market training' is misleading in the same way as 'vocational training schemes'. In Denmark 'labour-market training schemes' are understood to mean: **exclusively training schemes under the direction of the Ministry of Labour - regardless of whether the training is directed towards the unskilled or the skilled.** Despite the fact that it is official usage, this term does not **in any way** encompass all training schemes directed towards the labour market. 'Labour-market training schemes' are exclusively directed towards two sectors of the Danish labour market:

- unskilled adults who are available to the labour market, i.e. who have or are seeking work,

- further training of **skilled workers** who are also available to the labour market. But this training function is dealt with under the direction of two ministries - independently of one another.

'Labour-Market Training Schemes' also take place at particular training centres: AMU centres which are generally self-owning institutions with a representative body and board, where both local/regional trade and industry and local labour-market organisations are represented. There are 24 AMU centres in Denmark.

In this report three training programmes are dealt with under 'labour-market training schemes':

- semi-skilled worker training schemes
- further training of skilled workers and
- 'further training of persons with youth training giving vocational competence etc.'

2.1 Semi-skilled worker training schemes:

Aims:

This training programme is directed towards **unskilled** persons over the age of 18 who have or are looking for employment in the labour market - particularly the private labour market. Public-sector employees or persons seeking employment in the public sector may take part in the training scheme if they are to be qualified for work duties which can be equated with duties in the private labour market. Applicants are accepted according to differing priority, where the highest priority is accorded to applicants with tenure of employment.

Statutory basis:

'Law on labour-market training schemes' in Statutory Order no. 737 of 4 December 1988 as amended by law no. 374 of 6 June 1991.

Structure of the training schemes:

There are several programmes. For the most part, these training schemes are constructed from modules consisting of courses normally lasting one to three weeks. However, there are also longer courses since longer periods of training are offered for particular target groups consisting of several modules or combinations of courses - e.g. for employees in a firm. In addition, courses adapted to firms are offered as a specific response to the needs of individual firms.

As well as courses providing an introduction to a trade and individual courses, the semiskilled worker training also offers series of courses which give **increasing vocational competence up to a skilled level**. This applies for example to concrete-maker and plastics-maker training schemes and three training schemes within the butchery sector. Each of these training schemes lasts for approximately two years and consists of a number of course modules combined with work experience (two-part training).

The highest level in some semi-skilled worker training schemes can thus be

equated with certain 'vocational training schemes' (see Section 1, I.1).

The Labour Market Board points out that a skilled level can be achieved via semiskilled worker courses in two ways:

- an adult can enter into a contract with a firm on a specifically aimed semiskilled worker training scheme

- an adult can achieve skilled status step by step by systematically supplementing his vocational competence via semiskilled worker courses.

Duration:

75% of all students on courses in 1991 under this programme followed courses lasting between one and three weeks, and only 9% of the students were attending courses lasting more than six weeks. The average length of course (median) is 1.6 weeks.

Deviations from the normal pattern of training occur inasmuch as courses specially adapted ('tailored') to firms are held at the local level. In addition, general special courses can be divided into 'split courses'.

Private/individual qualifications can benefit through experienced employees in firms being able to register for courses at a higher level than initial or basic courses.

The control of semiskilled worker training schemes and the distribution of powers between the bodies/institutions involved is shown in **Table 4 on the next page.**

Table 4

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Labour: Training schemes providing vocational qualifications for adults: 3 of the training schemes providing vocational qualifications:** **Semi-skilled worker training schemes**
Minister of Labour:	Submits Finance Act proposals (= grant applications) relating to employment training schemes to the Folketing (Danish national parliament), undertakes marginal reprioritisations between employment training (AMU) programmes within the financial year. The administrative powers of the Minister of Labour are delegated to the Labour Market Board (AMS).
Labour Market Board (AMS):	AMS is the monitoring authority for controlling the activity and finance of the AMU centres (training institutions). AMS is responsible for drawing up syllabuses for the AMU centres.
Representation of labour market parties: (employer and employee organizations)	On the Training Council, on the Training Committee for semi-skilled workers, on the sector committees + on the boards of the AMU centres.
Central committees + committees (at national level) Training Council:	Advises the Minister of Labour, makes recommendations at least once per year to the Minister of Labour on the expected total need for training and grants within the AMU training schemes and is constantly involved within the financial year in reprioritisations between the AMU training schemes. The training committee for semi-skilled workers: involved in the specific assessment of the need for training within the individual sectors. Approves training programmes + training plans. The sector committees cooperate with AMS on the development of teaching.
The trade committees/sector committees: (equal composition)	
Local committees:	
Training institution. Powers:	The boards of the AMU centres make a distribution by sector of the specific courses on offer.
Controlling powers	
Control of content: Organisation of content of training	The training committee for semi-skilled workers approves training programmes and the teaching.
Control of supply: Deciding on training offered	The AMU arrange what is offered according to the needs of the local/regional labour market.
Control of demand: Decisions on admission to training	The AMU centres (the principal) decide according to rules laid down by the AMS.
Control of development: Decisions on adjustments to training in accordance with new courses within the category	The sector committees collect requirements for + draw up proposals for new syllabuses in cooperation with the AMS.
Overall responsibility for awarding vocational training qualifications:	The respective trade committee (committee with equal composition).

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2.2 Further training of skilled workers

Aims:

This further training is intended to safeguard the opportunity for **skilled workers** to update their vocational training qualifications in accordance with technological developments and the needs of the labour market.

Statutory basis:

The legal basis for the training is Ministry of Labour Order no. 460 of 11 July 1986. The programme is thus executed under the direction of the Ministry of Labour (but at schools coming under the Ministry of Education - see below).

Target group:

Persons who have previously undergone 'vocational training' (see Section 1, I.1) or who have achieved equivalent qualifications in some other way.

Characteristics of the further training:

The programme "is based on the initiative and responsibility for execution of joint further training committees" (Søren P. Nielsen, draft report for CEDEFOP, undated, p. 76). The programme consists of courses within the individual subject areas with job-oriented practical and theoretical contents. The contents of the courses are drawn up by the **trade further training committees** which have nationwide (national) powers and have equal representation of the relevant organisations in the labour market.

The further training scheme is constructed as modular or step-by-step series of courses where each step gives the student **independent vocational competence** (but not vocational training competence).

The programme now comprises approximately 900 different courses in 28 different sectors. The courses are generally held at vocational schools (technical schools and business schools), i.e. the schools where the

'vocational training schemes' under the direction of the Ministry of Education are otherwise held.

Duration and scope:

In 1991 the average length of a course was 1.3 weeks. 84% of all courses under this programme lasted one to three weeks. However, considerably longer further training schemes are also carried out - up to ½ year.

In 1991 41,150 people underwent further training under this programme. The numbers of people who had started on a course was 68,350. Of these, 8.4% were **non-skilled**. The programme is thus not exclusively reserved for the skilled. An overview of the distribution of powers in this further training and its control is presented in **Table** 5.

Table 5

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Labour: Training schemes providing vocational qualifications for adults: 3 of the training schemes providing vocational qualifications: Further training for skilled workers
Minister of Labour:	Submits Finance Act proposals (= grant applications) relating to employment training schemes to the Folketing (Danish national parliament), undertakes marginal reprioritisations between employment training (AMU) programmes within the financial year. The administrative powers of the Minister of Labour are delegated to the Labour Market Board (AMS).
Labour Market Board (AMS):	AMS discusses the overall prioritisation of the further training effort with the Training Committee for the further training of skilled workers and allocates block grants to the individual trade further training committees
Representation of labour market parties: (employer and employee organisations)	On the Training Committee for Further Training of Skilled Workers + the trade further training committees.
Central committees + committees (at national level) Training Council:	Advises the Minister of Labour, makes recommendations at least once per year to the Minister of Labour on the expected total need for training and grants within the AMU training schemes and is constantly involved within the financial year in reprioritisations between the AMU training schemes. The training committee for semi-skilled workers: involved in the specific assessment of the need for training within the individual sectors. Approves training programmes + training plans.
The trade committees/sector committees: (equal composition)	The trade further committees select training schemes (courses) within the sector area committee + implement these (are suppliers of courses).
Local committees:	Only within the commercial and office trades further training: undertake local control of supply and demand.
Training institution. Powers:	Executive only.
Controlling powers	
Control of content: Organisation of content of training	The trade further training committees in cooperation with AMS. The training committee for further training of skilled workers approves training programmes + syllabuses.
Control of supply: Deciding on training offered	The trade further training committees.
Control of demand: Decisions on admission to training	The trade further training committees.
Control of development: Decisions on adjustments to training in accordance with new courses within the category	The trade further training committees draw up proposals on new courses for the Training Committee for the Further Training of Skilled Workers.
Overall responsibility for awarding vocational training qualifications:	The respective further training committee (committee with equal composition).

2.3 Further training of persons with youth training giving vocational competence etc.

This vocational training programme overlaps the programme described earlier.

Aims:

The programme is intended to safeguard opportunities chiefly for those who have previously undergone a 'vocational training scheme' to update their vocational training competence in accordance with technological development and the needs of the labour market for technical and professional vocational competence.

Statutory basis:

Ministry of Labour Order no. 461 of 11 July 1986

Target group:

The actually permitted target group is considerably larger than the designation of the programme indicates. No formal training requirements are in fact set for applications, i.e. the title of the programme is misleading. The target group is as broad as: persons who either have or are seeking employment in the specialist field of the course in question, particularly in the private labour market, but persons who have or are seeking equivalent jobs in the public sector are also included in the target group.

Characteristics of the training scheme:

The courses provide general specialist competence in the specialist field. They are job-oriented in both practical and theoretical terms. The contents of the course are devised by the relevant **trade further training committees** - which have national authority - for approval on the Labour Market Board.

This programme too is made up of modules or step-by-step series of courses, where each course provides independent vocational competence. At present there are some 300 courses in this programme. However, the programme uses more training institutions than that discussed previously: the places of training are vocational schools but also AMU centres, technological institutes and FORCE institutes.

Duration and scope:

The average duration of these further training schemes is 1.1 weeks. No training scheme in this programme lasts longer than three weeks. They are held as daytime courses lasting for one week. However, the general courses may be divided (split courses).

In 1991, 4770 people took part in the programme.

An overview of the distribution of powers between the bodies involved and the control of the programme is presented in **Table 6**.

Table 6

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Labour:** **Training schemes providing vocational qualifications for adults: 3** **of the training schemes providing vocational qualifications:** **Further training of foremen, technical assistants etc.**
Minister of Labour:	Submits Finance Act proposals (= grant applications) relating to employment training schemes to the Folketing (Danish national parliament), undertakes marginal reprioritisations between employment training (AMU) programmes within the financial year. The administrative powers of the Minister of Labour are delegated to the Labour Market Board (AMS).
Labour Market Board (AMS):	
Representation of labour market parties: (employer and employee organisations)	On the advisory contact committee + the trade committees.
Central committees + committees (at national level) Training Council:	Advises the Minister of Labour, makes recommendations at least once per year to the Minister of Labour on the expected total need for training and grants within the AMU training schemes and is constantly involved within the financial year in reprioritisations between the AMU training schemes. The advisory contact committee advises the AMS - but without formal powers.
The trade committees/sector committees: (equal composition)	The trade committees advise the AMS on training needs, draw up proposals for training programmes + instruction, implement + monitor instruction.
Local committees:	
Training institution. Powers:	Executive only.
Controlling powers	
Control of content: Organization of content of training	The AMS approves training programmes + syllabuses drawn up by the trade committees.
Control of supply: Deciding on training offered	AMS decides on grant and activity limits following consultation with the Training Council + the trade contact committee. Within these limits the trade committees control supply.
Control of demand: Decisions on admission to training	The trade committees.
Control of development: Decisions on adjustments to training in accordance with new courses within the category	The trade committees in cooperation with the AMS. The AMS ensures that further training is coordinated between trade areas.
Overall responsibility for awarding vocational training qualifications:	The respective trade committee (committee with equal composition).

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3 Training schemes providing vocational qualifications under the direction of the Ministry of Education

3.1 Training schemes under the 'Law on open education'

Aims:

The objective of the programme is 'to promote a broad supply of vocationally oriented part-time training schemes giving competence and individual subject courses for the adult population' (Law no. 347, Section 1 first paragraph).

In practice, the main objective is to offer **training schemes that already exist** - chiefly part-time training schemes - or parts of them to the public at large in return for payment ('user payment').

Statutory basis:

Law no. 347 of 24 May 1989 on open education (vocationally oriented adult training - part-time training schemes and individual subject courses) with the amendment following from Section 18 of Law no. 352 of 14 May 1992.

Target groups:

The main target group is **adults in gainful employment**, i.e. generally adults who have a vocational training qualification. However, unemployed persons can also attend courses offered as open education.

Characteristics of the programme:

"Open education schemes are publicly recognised full-time training schemes organised as part-time training schemes and single-subject courses and part-time training schemes and parts thereof arranged as single-subject courses" (Order no. 795 on open education).

It is unique to open education that it **only makes use of existing training programmes** (comprising vocational schools, but also universities and other

higher educational establishments. The University of Copenhagen, for example, offers part-time training schemes and courses under open education).

With regard to utilisation of training programmes that already exist, open education runs 'across' many other training programmes. It thus comprises many vocationally oriented full-time training schemes giving competence under the direction of the Ministry of Education. 'Vocationally oriented' means that open education does not in all cases provide vocational training qualifications. Participation is often far too brief for this purpose or is limited to part of a full-time training scheme. Open education will nevertheless in most cases provide qualifications of vocational relevance.

The training institutions can freely offer the training schemes they offer on a full-time basis as open part-time training schemes. On the other hand, ministerial approval is required for offering other training schemes - which the institution does not offer on a full-time basis. But 'the training institution may <u>without approval</u> offer open training schemes and parts of their own training schemes' (Order no. 795, second paragraph - my underlining).

A number of whole training schemes which do not exist as full-time training schemes, e.g. business economist (merkonom), technologist (teknonom) and HD training schemes are, however, also offered as open education.

Duration/scope of open education schemes:

In this respect the institutions have broad limits, but teaching time for open education schemes **with state subsidies** must not be organised so that it excludes persons in full-time work (i.e. it must be placed outside normal working hours). However, this does not apply to open education schemes **without** state subsidies.

The institutions can thus choose between intensive instruction, e.g. at weekends or in a concentrated period, or a broader distribution of the same instruction over time. In addition, the number of hours of teaching applicable to full-time training schemes is not binding for open education

schemes. This means that fewer hours can be used for the same material for participants with the same background.

Number of participants:

The total number of participants in open training schemes in 1990 was approximately **141,000**, which converted corresponds to approximately **23,500** year students.

Recognition of private/individual qualifications:

To the extent that practical experience is included or assumed prior to a course of training under open education, Ministry of Education Order no. 795 stipulates the following: 'The training institution approves to what extent prior practical vocational experience can be equated to the practical training prescribed for the training scheme'. It is thus not the state but the individual training institution (in the case of 'vocational training schemes' etc. in consultation with the local training committee) which decides whether to approve private/individual qualifications/merits in the practical area.

Recognition of merits can also take place in the form of **tests for private-study students**. The Law on Open Education stipulates on this point that: 'Students who have not taken part in the instruction (private-study students) can take tests and take part in other assessments which are included in part-time training schemes and individual subject courses offered under this law' (Statutory Order no. 682 of 29 July 1992).

The distribution of powers between bodies/institutions and the control of open education is shown in **Table 7 on the next page.**

Table 7

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults::** **Under the Open Education Act (only partly providing vocational qualifications)**
Minister of Education and Research:	Approves open education programmes and at what institutions + according to what rules they are to be offered.
Representatives of labour-market organisations:	On board of vocational schools
Central councils + committees (at national level)	Full-time training schemes providing vocational qualifications are offered for example as part-time programmes (e.g. for employees in full-time work)
Local committees linked to training/project groups	None
The trained institutions/firms	Board of vocational schools decides on supply of open education
Controlling powers	
Control of content:	Established via Orders from Ministry of Education.
Control of supply:	Schools/training institutions decide for themselves
Control of demand:	The training institutions decide who is to be accepted
Control of development:	Identical to the powers for the corresponding full-time training schemes.
Legal responsibility for awarding vocational training qualifications:	The school/training institution

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3.2 Advanced technician training schemes

Aims:

The objective is to provide new or further vocational training qualifications - beyond the general skilled level within the areas of technical 'vocational training schemes'. In addition, this programme is intended to qualify participants for great or greater ability to adapt to new technological and changed labour-organisation circumstances.

Statutory basis:

The statutory basis is the Law on Advanced Technician Training Schemes etc., cf. Statutory Order no. 370 of 30 May 1990.

Target group:

The target group is persons who have passed a technical 'vocational training scheme'.

Characteristics of the training schemes:

The training schemes are arranged as an extension of technical 'vocational training schemes' and are based on the knowledge a person possesses as a skilled worker. The instruction is given at theoretical and practical level and covers technological, workshop or laboratory subjects, but also **general subjects** such mathematics, natural sciences and foreign languages. Teaching is also given in planning, production control and quality control, business economics, management etc. In addition, the teaching includes **optional subjects** and subjects **adapted to local circumstances**.

22 advanced technician training schemes are currently offered in Denmark.

Duration/scope of the training schemes:

The training schemes last 1½ years. They **come under the Law on Open Education** (see Section 1, II, 3.1), i.e. they can also be offered on a

part-time basis or individual subjects can be offered separately.

Number of participants:

Among the 22 different training schemes, the following were among the most commonly used in 1990:

- mechanical engineer	664 participants
- building designer	550 "
- electrical engineer	537 "
- laboratory technician	346 "

Altogether, there were just under 4,000 participants in the advanced technician training schemes in 1990.

As the training schemes are offered under the Law on Open Education, vocational qualifications of private/individual relevance can be aimed for. However, it is up to the **training institution** concerned (and not the state/ministry) to decide whether such qualifications are to be recognised in the individual cases.

The distribution of powers between the various bodies/institutions and the control of these training schemes are shown in **Table 8** on the next page.

Table 8

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults: 3 of the training schemes providing vocational qualifications:**
	Advanced technical training schemes
Minister of Education and Research:	Arranges technician training schemes on the recommendation of the Technician Council and technician committees.
Representation of Main Labour Market Organisations:	On the Technician Council
Representation of Labour-Market Organisations:	On the Technician Committees, the local training committees + boards of governors of vocational schools.
Central councils + committees (at national level) — Technician Council:	Makes recommendations to the Minister on division into technician areas + composition of the technician committees in each technician area, setting-up/closing-down of technician training scheme + frameworks for training schemes. Can decide on special training experiments.
Training Councils:	Members nominated by the Minister advise the Minister on the structure for all continuing training schemes.
Technician Committees:	Make recommendations to the Minister on the individual technician training scheme inc. aims, admission routes, structures, duration, examination etc.
Local training committees:	Advise the vocational school on local adaptation of training, create contact between students and firms.
Boards of governors of the vocational schools:	Constitute the senior management at the school, administer the State block grant to the school.
Controlling powers	
Control of content: Organisation of content of training:	The Minister establishes objectives, subject aims and range of subjects on the recommendation of the Technician Council. The schools operationalise these frameworks in cooperation with the local training committees.
Control of supply: Decisions on the training offered:	The schools establish the training schemes offered and the intake capacity.
Control over demand: Decisions on admission to training:	The school draws up admission conditions and adapts them in the event of oversubscription.
Control over development:	The technician committees undertake training reviews. The Minister of Education can implement development work on application from schools/interested parties.
Legal responsibility for the awarding of vocational training qualifications:	The school.

3.3 Market economist training

Aims:

To qualify people at an operational level to work in the marketing and market adaptation of products and services and for other commercial tasks in commercial, production and service firms.

Statutory basis:

This training scheme - like the other two mercantile training schemes - does not have any independent statutory basis. Law no. 210 of 5 April 1989 on **vocational schools** (which are training institutions for the 'vocational training schemes') is also the statutory basis for the market economist training scheme.

Target groups:

Target groups for this training scheme are persons with upper secondary-school education or continuing training after a 'vocational training course' in commercial and office trades. The **schools** can also recognise private or individual qualifications, i.e. a different training background than that referred to above, if this, in the school's judgment, makes it possible for the applicant to complete the training with satisfactory results in the normal time.

Characteristics of the training scheme:

The training scheme was introduced in 1990 at 14 business schools spread across the country as a result of increased qualification requirements for market economics competence with a view to the EC's Single Market and the generally increased importance of international trade.

The instruction in this training scheme must be related to vocational practice and applied theories. Instruction is given in two foreign languages (one of which is English), and also in mathematics, economic subjects, commercial law, organisation, administrative systems and

statistics. The form of teaching is intended to develop the technical independence of the students.

Duration and scope:

It is a full-time training scheme lasting 27 months.

The number of students on the training scheme was 950 in 1990 and 1,450 in 1991. It is intended that the capacity of the commercial schools for this training scheme will be greatly increased over the next few years.

An overview of the distribution of powers between bodies/institutions involved and the control of the market economist training scheme is presented in **Table 9 on the next page**.

Table 9

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults:
	Market economist training
Minister of Education and Research:	Controls training: places and determines the size of this training scheme at business schools. (Not via separate training law, but via Finance Act (state budgets) and Vocational Schools Act).
Representation of Main Labour-Market Organisations:	Not represented
Representation of Labour-Market Organisations:	Not represented
Central councils + committees (at national level) Technician Council:	
Training Councils:	Social Training Council (members personally appointed by the Minister of Education). The Council provides top-level advice to the Minister on the training schemes concerned).
Technician Committees:	
Local training committees:	
Boards of governors of the vocational schools:	Execute control instructions from the Minister.
Controlling powers	
Control of content: Organization of content of training:	The Minister establishes content, possibly in consultation with the Training Councils or groups set up on an ad hoc basis.
Control of supply: Decisions on the training offered:	The Minister places and determines the size of the training scheme at business schools within budget limits.
Control of demand: Decisions on admission to training:	Via particular examination certificates for training schemes providing general qualifications - or particular vocational training schemes. However, the school may make exceptions from this.
Control of development:	The Minister of Education..
Legal responsibility for the awarding of vocational training qualifications:	The Minister of Education.

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3.4 Computer scientist training scheme

Aims:

To qualify people for independent work on computer systems for commercial application and independently to develop and maintain computer systems for this purpose.

Statutory basis:

The computer scientist training scheme does not have any particular statutory basis. The statutory basis is Law no. 210 of 5 April 1989 on **commercial schools** and Law no. 347 of 24 May 1989 on **open education** (see Section 1, II.3.1).

Target group:

This training scheme has the same target group as the market economist training scheme, and in addition covers those who have passed the information data-processing assistant's examination.

Characteristics of the training scheme:

The training takes place in school (no work experience element). It is divided into five semesters, each semester having an overall teaching topic which is intended to enable the students to make a more in-depth study of special areas within the subject, but the school is also intended to ensure educational and technical coherence within the individual topics and in the training scheme as a whole. The instruction is intended to develop the students' technical independence and qualify them to solve computing problems independently and devise methods in this connection for themselves.

Duration/scope:

This is a full-time training scheme lasting five semesters = 27 months.

The intake of students on the training scheme was 260 in 1990 and 1,075 in 1991.
This four-fold increase in intake between 1990 and 1991 is partly due to the data-processing assistant training scheme in Denmark having been closed down.

As in a number of other training schemes under the direction of the Ministry of Education, the **school** can recognise individual/private qualifications and a different educational background as a merit in relation to requirements for study, if the school judges that these enable the applicant concerned to complete the training with satisfactory results in the specified time.

The distribution of powers between the bodies/institutions involved in the computer science training scheme and its control is presented in **Table 10 on the next page**.

Table 10

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults:
	Computer-scientist training
Minister of Education and Research:	Controls this training scheme. (not via separate training law, but via Finance Act).
Representation of Main Labour-Market Organisations:	Not represented
Representation of Labour-Market Organisations:	Not represented
Central councils + committees (at national level) — Technician Council:	
Training Councils:	The Natural Sciences Training Council (members personally appointed by the Minister of Education). The Council provides top-level advice to the Minister on the training schemes concerned).
Technician Committees:	
Local training committees:	
Boards of governors of the vocational schools:	Establishes and determines size of the training scheme
Controlling powers	
Control of content: Organisation of content of training:	The Minister establishes content, possibly in consultation with the Training Councils or groups set up on an ad hoc basis.
Control of supply: Decisions on the training offered:	Established and size determined freely by the business schools.
Control of demand: Decisions on admission to training:	The commercial school.
Control of development:	The Minister of Education.
Legal responsibility for the awarding of vocational training qualifications:	The Minister of Education.

3.5 Business academy training schemes (advanced training schemes at business colleges)

Aims:

To provide advanced vocational competence within particular areas of work in the commercial and office sector - over and beyond the level of qualification provided by the three-year 'vocational training schemes'. The training schemes are intended to qualify students to undertake administrative or commercial duties independently in trade and industry.

Statutory basis:

The training schemes do not have any particular statutory basis. The statutory basis is common to that of several new training schemes: Law no. 210 of 5 April 1989 on **vocational schools.**

Target group:

The target group is adults who have completed a 'vocational training scheme' in the commercial and office area, a higher diploma in business or other training which gives an exemption with respect to admission to the scheme.

Characteristics of the training schemes:

There are at present fifteen different business academy training schemes which differ in content but are structured according to **common guidelines from the Ministry of Education.** The individual training schemes are arranged on **local initiative** in cooperation between the business school and local trade and industry. The training schemes are **two-part**. They consist of a theoretical part which is carried out at a business school and a practical part in one or more firms. Both parts of the training schemes are to be integrated in terms of subject and theory, and during the training the school can set the students assignments as an element of the training.

Duration and scope:

The fifteen training schemes vary considerably with regard to duration (between one and three years). Half of the training must normally be work experience in one or more firms.

The intake to the new business academy training schemes was 418 students in 1990 and 468 students in 1991.

The individual business school can recognise private/individual qualifications, i.e. a different educational background than that which gives right of admission, if the school judges that the applicant can complete the training with satisfactory results in the specified time.

The distribution of powers between bodies/institutions and the control of these training schemes is presented in **Table 11 on the next page**.

Table 11

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults: Business Academy training schemes
Minister of Education and Research:	Controls this training scheme. (not via separate training law, but via Finance Act).
Representation of Main Labour-Market Organisations:	Not represented
Representation of Labour-Market Organisations:	Not represented
Central councils + committees (at national level) — Technician Council:	
Training Councils:	A training committee linked to this training scheme advises the Minister.
Technician Committees:	
Local training committees:	
Boards of governors of the vocational schools:	Establishes and determines the size of the training scheme
Controlling powers	
Control of content: Organization of content of training:	The Minister approves the content (drawn up by the commercial schools) on the recommendation of training committee.
Control of supply: Decisions on the training offered:	Established and size determined freely by the commercial schools.
Control of demand: Decisions on admission to training:	The commercial school.
Control of development:	The Minister of Education.
Legal responsibility for the awarding of vocational training qualifications:	The Minister of Education.

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3.6 Further training of farmers

Aims:

The official objective is the further training **and continuing training** of farmers and their partners.

Statutory basis:

Law no. 371 of 6 June 1991 on agricultural training.

Target groups:

It is more wide-ranging than the title and objective of the programme suggests: as well as farmers and their partners, the programme is generally intended for **adults who want or have employment in agriculture** (i.e. regardless of their agricultural qualifications).

Characteristics of the training scheme:

It is misleading to call the programme a further training programme: it serves the function of further training, continuing training and even initial training:

- for persons with training as independent farmer (who have gone through the add-on training in agriculture), the programme serves as genuine further training,

- for farmers who only have initial agricultural training, the programme may genuinely have a continuing training function,

- for persons **without** agricultural training, the programme provides vocational qualifications so that it genuinely has the character of **basic training**.

Duration and scope:

The training scheme covers all vocational subjects of importance to agriculture. By far the majority of residential courses last one week. The programme can utilise training capacity previously reserved at the schools of agriculture. Teams of students under this programme have to be integrated into the schools' general teaching on agricultural training schemes.

Some 8,000 weekly training courses were held in 1990. This level is below the capacity of the schools for this 'further training'.

An overview of the distribution of powers between the bodies/institutions involved and the control of the programme is presented in **Table 12 on the next page.**

Table 12

Distribution of powers between bodies/institutions:	Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults: Further training of farmers
Minister of Education and Research:	Approves the need for the individual school of agriculture
Representation of the labour-market organisations:	On the advisory committee
Central councils + committees (at national level)	The advisory committee for this further training controls the development of the training in cooperation with the schools of agriculture.
Local groups linked to the training scheme/project groups	None
The trained institutions/firms	Fill out the Ministry frameworks for the content of the training
Controlling powers	
Control of content:	The Minister of Education establishes frameworks for the contents of the training scheme. The schools of agriculture fill them out, establish what they offer.
Control of supply:	The board of governors of the individual school
Control of demand:	The school.
Control of development:	The advisory committee in cooperation with the schools
Legal responsibility for the awarding of vocational training qualifications:	The school and the Ministry of Agriculture

3.7 Further training cf. Law 271 (Law on Further Training)

Aims:

The objective of Law 271 is to promote the development and implementation of further and continuing training providing vocational qualifications in close local cooperation between commercial firms and training institutions in order to strengthen the renewal and conversion to new technology, new methods of production or new management principles of exporting firms and firms competing with imports.

Statutory basis:

Law no. 271 of 6 June 1985 on further training, vocationally oriented courses etc.

Target groups:

The target group consists of persons with vocational training qualifications the level of which lies between those of skilled workers (who have completed a 'vocational training scheme') and long advanced educational programmes, i.e. corresponding to a completed advanced 'vocational training scheme'. Courses under this programme are aimed at the private sector, but public-sector employees and the unemployed may also take part.

Characteristics of the programme:

The programme is dependent upon local initiatives and close cooperation between commercial firms and training institutions. Further training is both courses and **projects** which produce and pass on knowledge relevant to the development of firms. Projects and courses can be combined/integrated to form a total sequence of training and development.

In 1992 the programme is financing the following areas of technology and management:

- biotechnology
- environmental technology
- internationalisation
- product development
- quality development
- management development
- qualification development

The courses under this programme are developed by consortia consisting of firms and training institutions. Commercial firms must be involved in the development of the projects, both financially and in terms of content. A minimum of 30% co-financing from the consortium is required (i.e. max. 70% state subsidies via the Law 271 programme).

The training consortia may include AMU centres (which carry out the 'labour-market training schemes') alongside vocational schools (technical schools, commercial schools).

There is great freedom of choice with regard to the development and organisation of projects and courses under this programme.

Duration and scope:

Nor are there any formal requirements on the duration of courses. The courses altogether last about 10-30 hours - either together or divided between several sets. They can be held in daytime or in the evening or at weekends. There is also flexibility with regard to forms of instruction (see Section 2.7).

In 1991 some 500 courses were held with about 15,0000 student-weeks and some 100 projects.

The distribution of powers and the control of this further training is presented in **Table 13 on the next page**.

Table 13

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Education: Training schemes providing vocational qualifications for adults:** **Under Law 271 on (vocationally oriented) further training**
Minister of Education and Research:	Deals with financial and practical administration
Representation of the labour-market organisations:	On the Further Training Council
Central councils + committees (at national level)	The Further Training Council advises the Minister on the overall situation relating to application of Law 271. An expert group advises the Minister on technical courses and specific development projects.
Local groups linked to the training scheme/project groups	Special groups exercise monitoring tasks in relation to the training projects.
The trained institutions/firms	Commercial firms are directly involved in the training and co-finance it. Institutions/schools decide which + how many courses are offered.
Controlling powers	
Control of content:	After advice/statements from the Further Training Council and the expert group, the Ministry establishes the overall limits for this further training. The institutions/schools decide on the specific content of the training.
Control of supply:	The training institutions decide which and how many courses they offer.
Control of demand:	The Minister establishes the target groups for the training. The training institutions control acceptance.
Control of development:	In consultation with the Further Training Council and the expert group, the Minister decides on development of training.
Legal responsibility for the awarding of vocational training qualifications:	

3.8 The long advanced educational programmes

As in other EC countries, the long advanced educational programmes (previously known as 'higher education') take place at the universities and other higher educational establishments. The conditions for admission are generally successful completion of upper secondary-school education (school-leaving certificate, higher preparatory examination (HF), higher commercial examination (HH) or higher technical examination (HTX).

Under these conditions - which differ for the individual training institutions - persons without an upper secondary-school examination also have right of admission. Refugees (foreigners), for example, have the right of admission to many of the long advanced educational programmes in Denmark after passing the Danish **upper secondary-school induction course for refugees (GIF),**

The specified durations of long advanced educational programmes vary from 3½ years (academic engineer) to 6½ years (doctor's training), the most common duration between five years.

There is wide variation in the structure of studies. There are also considerable variations within the same branch of study in the formal structure between the different training institutions in Denmark. For example, the structure of study at the Roskilde University Centre differs from that of the other institutions in having a two-year **basic training scheme** applicable to all studies within the same faculty. Similarly, the structure of study at Aalborg University Centre differs from the structure at the other institutions e.g. in relation to the `achelor training (see later).

Within the arts, the three Danish universities (Copenhagen, Århus and Odense) offer what are known as add-on training schemes and supplementary training schemes lasting 1-1½ years.

There are also numerous variations with regard to the structure of studies and conditions of admission and study. At Copenhagen University, for example, the subjects of mathematics, statistics, physics and chemistry

represent a common admissions (matriculation) area, and during the first year of study the students continue to have the opportunity to make the final choice of direction of study within the area. A similar situation applies at Århus University in the area of natural sciences.

Bachelor programmes:

The Ministry of Education has introduced **three-year bachelor programmes** in the arts, social sciences and natural sciences. These programmes take place the Danish universities and university centres.

Within the area of natural sciences, bachelor programmes are three-year initial training programmes. However, there are differences in structure: at Århus University, for example, the natural-science training starts with a two-year Part 1. It is then possible to choose a one-year bachelor course of study leading to **B.S.** or a two-year Part 2 to become 'kandidat' (holder of final degree) or Ph.D. At Copenhagen University, all who start on natural-science studies follow three years of initial training. It is then possible to finish the training with the bachelor's degree of B.S. or continue with a two-year add-on period of training. In the social sciences, the bachelor's degree at present can only be obtained at Roskilde University Centre.

The first part of the business economics degree courses in Denmark ends at a level which more or less corresponds to the level of bachelor. The first part is three-year period of training **giving independent vocational competence** (HA training).

Private/individual qualifications may under certain conditions be recognised as giving right of admission to certain studies (see also Section 2 on long advanced training schemes).

Universities and higher educational establishments can also, with the approval of the Ministry of Education, offer some of their training schemes as **open education**, i.e. it is possible to take part in some training schemes **on a part-time basis** and in return for payment **alongside one's full-time paid employment**. Copenhagen University offers parts of some

studies as open education.

Private students:

Ministry of Education Order no. 795 on open education stipulates among other things that persons who are not involved in open education or full-time education can, as private-study students, take tests or take part in other assessment in part-time training schemes and single-subject courses offered as open education (Section 20, first paragraph).

The same Order also stipulates that: 'The educational institute may give approval for self-study students to take tests in training schemes which are not approved as open education' (Section 20, third paragraph), and 'Rules...on assessment and the issuing of certificates are applied correspondingly for private-study students' (Section 20 fourth paragraph - my underlining).

The single-course scheme

This scheme at universities and higher educational establishments also comes under the heading of open education. There is a scheme of this kind for example at Copenhagen University: it is possible in return for payment to attend courses at the university without having matriculated as a student. However, the students have first right to places on courses, whilst vacant places can be used by those who are not students of the university. Those interested have to apply for permission, however (partly because of the payment).

Control of the long educational programmes:

The long advanced educational programmes are **controlled centrally** by the Ministry of Education on the basis of special legislation and Ministerial Orders. Within these legal and economic limitations, the Danish universities and other higher educational establishments, however, have powers of disposal which genuinely represent some degree of self-governing.

4 Training schemes providing vocational training under the direction of the Ministry of Industry:

Maritime Training Schemes

4.1 Ships's assistant training scheme

Aims:

The aim depends on the target group: for young people without any education or training beyond primary and lower-secondary school who are seeking employment in the shipping industry, the objective is:

- training in sea rescue and safety at sea
- a basic practical and theoretical introduction to navigation.

The objective of the training for candidate ships' assistants who have completed an initial course in this training and the service in oceangoing ships laid down in the Merchant Shipping Act (time at sea): to provide final practical and technical training.

Statutory basis:

Law on Maritime Training, cf. Statutory Order no. 371 of 31 May 1990 and the Merchant Shipping Act.

Target group for the training:

All who have completed at least the ninth class of primary and lower-secondary school.

Characteristics of the training scheme:

It is two-part training which alternates between school instruction and practical training on board ships. On the basis of the sole criterion of the age of the participants, the ship's assistant training scheme will belong to the category of 'vocational training schemes' (also known as

youth vocational training schemes). However, the ship's assistant training scheme does **not** have the dual function of providing **both** vocational qualifications **and** general qualifications (via the series of subjects and the scope of subjects providing general qualifications in the school element of the training) which is the objective of the 'vocational training schemes'. (To retain this characteristic as distinct from other training schemes in the terminology employed, 'vocational training schemes' are also termed youth vocational training schemes.)

Duration and scope:

The school element of the training lasts a total of 8 months, divided into three modules of 5, 15 and 13 weeks. After these modules and practical training of varying length on ships over the course of 18 months of sailing time, the trainee obtains the vocational training qualification of 'able ship's assistant'.

The number of young people taking part in the school element of this training in 1990 was:
in module 1: 504
in module 2: 353
in module 3: 84

It is apparent from this distribution that many young people **drop out** between the school modules.

The distribution of powers and control **for all maritime training schemes together is shown in Table 14 at the end of this section.**

4.2 Navigator training schemes

This designation covers six different training schemes:

- master of yacht
- master of coastal vessel
- master of fishing vessel
- duty first mate

- master of home-trade vessel, and
- ship's master

Statutory basis:

Law on Maritime Training and the Merchant Shipping Act.

Target groups:

Varies according to training: the Merchant Shipping Act lays down the requirements in relation to time spent at sea which are admission requirements for the individual training schemes. In addition to the requirements relating to time spent at seat, several other admission requirements are set for the training schemes providing greater qualifications.

Characteristics of the training schemes:

The Maritime Board implements and administers the maritime training schemes at approved schools, which are either state schools or self-owning institutions. Curriculum and examination requirements vary widely between the training schemes. Assignments are laid down according to the provisions of the international convention on the training of mariners etc.

Duration and scope:

The individual training schemes have a specified length of time for the theoretical element. This lasts between 6 months for the shortest training scheme (master of coastal vessel) to 36 months for training as ship's master. The total period of training, including time spent at sea, lasts considerably longer, however.

The number leaving each year is low, between 22 and 59 per training scheme. However, in 1991 there were 160 new admissions to the Danish navigation schools.

4.3 Marine engineer training scheme

This training scheme is not just a maritime training scheme, it provides vocational training qualifications for use **both on land and at sea**. This is expressed in the aim of the training:

Aims:

- to qualify trainees independently to manage the operation and maintenance of technical plants and installations,

- to qualify trainees to ensure optimum operation of technical plants in relation to safety, economic operation and the environment.

Target group:

All who fulfil the following conditions:

- school education corresponding to the expanded leaving examination of primary and lower-secondary school in the relevant subjects

- a technical 'vocational training scheme' or

- a theoretical and practical training scheme lasting 30 months (known as workshop training) approved by the Maritime Board.

Other characteristics of the training scheme:

The curriculum requirements are laid down in accordance with the international convention on the training of mariners etc. The training is given in the form of full-time daytime instruction.

Duration:

The training lasts three years with 1,200 lectures per year.

In 1990 270 marine engineers qualified in Denmark.

4.4 Ship's cook training scheme

This training is based on **completed land-based training** as cook. The cook's training scheme belongs to the category of 'vocational training schemes' (see Section 1, I.1), i.e. it is a youth training scheme which provides **both** vocational training qualifications **and** general qualifications.

Statutory basis: Law on Maritime Training

The actual ship's cook training scheme consists of a supplementary course on top of the normal land-based cook's training. The course is specified as lasting **five weeks** and comprises training in:

- special catering conditions at sea
- duties on board
- safety on board, sea rescue and safety at sea.

Only a small number of ships' cooks are trained each year. 48 were trained in 1991 (according to regulations previously applicable which in the meantime have been replaced by the above).

As the ship's cook training scheme is in fact a 'vocational training scheme' supplemented by a course and not an independent maritime training scheme, it is not discussed as an independent training scheme in Sections 2 and 3.

The following **Table 14** gives an overview of the distribution of powers and control for **all** Danish maritime training schemes.

Table 14

Distribution of powers between bodies/institutions:	**Under the direction of the Ministry of Industry:**
	Maritime training schemes:
Minister of Industry:	Establishes state schools, exercise and school ships for maritime training schemes, approves self-owning institutions for teaching on maritime training schemes, appoints Maritime Training Council, appoints examinations committees for maritime training schemes.
Maritime Board:	On recommendation of the Maritime Training Council, lays down: rules on conditions for admission to training schemes, organisation, content and extent of teaching, required qualifications for teachers, examination arrangements etc. Supervises training schemes + oversees operation of state schools and exercise ships.
Central councils + committees — Maritime Training Council:	Expresses opinions to the Minister/Maritime Board on questions concerning shipping training schemes, including adaptation of training schemes to the needs of the maritime trade. Appoints standing committees concerned with the individual areas of maritime training. The council can itself take up for discussion training matters and give recommendations on these.
Standing committees for each area of training:	Discuss questions concerned with the area of training concerned.
Examination boards:	Devise examination questions and conduct the examinations.
Maritime schools, including self-owning teaching institutions:	Are only bodies carrying out training, do not have any powers with respect to the organization or offering of training schemes.
Controlling powers	
Control over content:	The content of the training schemes is controlled centrally - on the recommendations of the Maritime Training Council and the standing committees. The content is fixed in accordance with mariners, on shipping and keeping watch, with associated resolutions and relevant international recommendations.
Control over what is offered:	The Maritime Board establishes the number of classes for the individual maritime training schemes, primarily on the basis of the granted financial budgets and shipping.
Control over demand:	The Maritime Board establishes the admission requirements on the recommendation of the Training Council (qualification requirements).
Control over development:	Initiatives for new courses and changes to the training schemes are made centrally on the Maritime Board on the recommendation of the Training Council and the standing committees.
Legal responsibility for the awarding of vocational training qualifications (maritime trading certificate):	The Maritime Board.

Section 2

Access to qualifications

I Training schemes providing vocational qualifications for young people

1 'Vocational training schemes'

This category of training belongs to what are referred to as youth training schemes (see section 1, I).

The quotations for this discussion of 'vocational training schemes' are taken from the following sources:

- Law no. 211 of 5 April 1989 on vocational training schemes (referred to below as 'the Act')

- Order no. 87 of 12 February 1990: 'Order on Vocational Training Schemes', abbreviated below as 'the Order'.

Admission:

Anyone who has completed the ninth class of basic compulsory schooling (folkeskole) has the right of admission to a 'vocational training scheme'. All who fulfil this condition 'have the right to be admitted to the first and second school period of training, according to their own choice' (the Act, section 5, second paragraph).

However, the Ministry of Education on the recommendation of the **Vocational Training Council** (Erhvervsuddannelsesrådet) can restrict admission to school instruction within individual training schemes **in consideration of employment opportunities** when the training is completed.

The school element of 'vocational training schemes' is carried out at the vocational schools. These 'have a duty within the vocational training schemes offered by the school to accept all applicants .... or to ensure that they are accepted at another school...' (section 6 of the Act).

Organisation of training:

'Vocational training courses' have two school periods, the first and second periods. Each school period lasts twenty weeks. The second period can be divided into shorter periods for those trainees who have entered into a **training agreement** (see later). The first and second school periods can be combined into a total period of forty weeks for commercial and office training schemes. But: 'For trainees who have entered into a training agreement within commercial and office training schemes, ..., school instruction can be given in periods shorter **than whole weeks** (the Act, section 11, paragraph 5).

'Vocational training schemes' take the form of full-time instruction. They do not involve self-study or distance teaching, but the Act and the Order provide opportunities for experiments with these. The Ministry of Education can grant exemptions from various provisions of laws and orders in connection with training experiments.

The Act allows **flexibility** with regard to the duration of 'vocational training schemes': The training scheme can be organised so that the trainees at one or more times before the end of the general course of training can discontinue the course with a completed training scheme (section 15, second paragraph of the Act, my underlining).

The work experience element constitutes by far the greater part of the training for most 'vocational training schemes'. It is provided in one or more commercial firms. The trainee may - after having entered into a training agreement with a firm - start his training with a work experience period in the firm as the first period of his work experience element.

Structure and flexibility in qualification:

As discussed in section 1 of this report, the purpose of youth training schemes is continued general qualification of trainees beyond the ninth and tenth classes **at the same time as** vocational qualification. But the vocational qualification must also be provided in a relatively broad manner '... with a significant breadth, including in area of work and function,

with a view to being able to meet changing needs for qualifications on the labour market and being able to provide a basis for further education, including advanced training (section 15, first paragraph of the Act - my underlining).

As mentioned, the work experience element constitutes the major part of by far the majority of 'vocational training schemes'. The work experience period of the individual trainee is ensured by means of a **training agreement** entered into between the trainee (and his or her parents) and the firm or firms in which the trainee is to receive the practical specialised training. The training agreement is a **condition** for the **implementation** of a 'vocational training scheme' - but not for admission to it. 'The agreement must cover all the work experience periods and periods spent at school in the training scheme, including any **apprenticeship test**' (Order section 48, first paragraph).

A distinction is made between ministerially **approved** and (as yet) **non-approved** 'vocational training schemes'. The non-approved training schemes are implemented as experiments. Post-facto ministerial approval is required for such experiments within two years if they are to continue beyond the trial period.

Each one of the ministerially approved 'vocational training schemes' is governed by a separate set of rules from the Ministry of Education (a training order). At present training is given in 83 approved 'vocational training schemes' in Denmark on the basis of 83 corresponding training orders. The Ministry of Education lays down the technical content in the individual order **according to the stipulations of the trade sector committee concerned**. There is a sector committee with powers to stipulate rules for each sector of industry.

Work experience element:

The main function of the work experience element is that the trainee should achieve vocational training skills. It is also to be carried out according to the rules in the Order. These stipulate for example the **objectives** to be attained via work experience and contain **descriptions of the work duties** in

which the trainee is to be trained. The rules must also ensure that the school and work experience elements **complement each other** in an appropriate manner. The Order therefore also contains provisions on **contact between school, firm and trainee**. The rules are also to provide a basis for the work experience firm to organise the work experience element.

The school element:

The school element is also governed by the Order for the 'vocational training scheme' concerned. After the first period at school, the trainee, following agreement with his or her work experience firm, can **freely choose a second school period**. However, this does not apply to commercial and office training schemes, where both school periods can be combined into one period. Total school instruction in the 'vocational training scheme' normally **cannot exceed 80 weeks**.

Flexibility and opportunities for transfer:

In the first school period, the schools have to take account of the **different backgrounds** of the trainees through **differentiated instruction**, which as far as possible is to be given at divided levels. The flexibility of instruction is also expressed through the trainees being able to choose various optional subjects in addition to compulsory subjects.

The 'vocational training system' is made more flexible still through a series of ministerial stipulations (in the Act and the Order), such as exemption from teaching: trainees with special training and employment backgrounds are exempted from parts of the training scheme' (Act section 13, second paragraph). Detailed rules on this point are laid down on the recommendation of the Vocational Training Council.

Cooperation between several educational institutions and additional instruction beyond the limits of the trainee's own school: in section 14, the Order stipulates: 'the school must offer a reasonable number of optional subjects ... possibly in cooperation with other educational institutions' (fifth paragraph). 'The school may, where appropriate, in cooperation with other educational institutions offer instruction in

subjects which **is given at other forms of school** ...'. This is a reference to schools in the **general** adult education system, e.g. what are known as adult education centres, which offer general school subjects and individual subjects. 'The trainees may in addition ... choose subjects at other educational institutions, provided the subject is not offered at the trainee's school' (sixth paragraph, my underlining).

Transfer of trainees **to other 'vocational training'**: 'additional courses may be organised with a view to the transfer of trainees to a different vocational training scheme than the one on which they started.' (section 16 of the Act).

Compensation for lack of work experience places:

'For trainees who have undergone the first part of school instruction and who then search in vain for a work experience place, school instruction can be organised which wholly or partially replaces the practical training'. This compensatory instruction is given as practical vocational instruction in special school workshops.

Qualifications achieved:

On completion of a 'vocational training scheme', a **training certificate** is issued, when the school and work experience training have been carried out and the **apprenticeship test** has been passed - for the training schemes which are completed with an apprenticeship test. The Order specifies precisely what information on the training and the performance achieved by the trainees the training certificate is to contain.

A 'vocational training scheme' which has been carried out **gives vocational training competence in the subjects concerned,** but in addition also gives the trainee the competence with which to **start on an advanced 'vocational training scheme', e.g. advanced technician training.**

2 Initial training as skilled farmer and add-on training schemes

The quotations used in this section are taken from the following sources:

- 'Law on agricultural training' of 6 June 1991 (referred to below as 'the Act'), Ministry of Education Order no. 146 'training as skilled farmer (basic agricultural training)' of 28 February 1992 (referred to below in abbreviated form as: Order 146)

- Order no. 147 'on add-on training schemes in agriculture' (referred to below in abbreviated form as: Order 147)

Right of admission to the training schemes:

All who have completed the ninth year of basic compulsory schooling have the right of admission to the basic training scheme. The law stipulates that: 'Applicants are admitted to the school they desire if there is space and if in the judgment of the school they are expected to be able to follow the instruction in a satisfactory manner and complete the training in the normal time' (Section 9 second paragraph of the Law - my underlining).

The basic training has several **parallels with the 'vocational training schemes'**: It can be started either at a vocational school or with a period of work experience (in an agricultural business). The Act stipulates on this point that: 'It is a condition for starting on a period of work experience in the basic training scheme that a training agreement has been entered into between the trainee and one or more agricultural businesses which covers at least the period of work experience and the subsequent period at school' (Section 18 of the Act - my underlining). The provision corresponds to that on 'vocational training schemes'; however, a written agreement is required for these.

However, admission criteria are also flexible - again in parallel with the 'vocational training scheme': 'Trainees with special training and employment backgrounds are exempted from parts of the training ...' (Section 8 of the Law). This may apply to trainees who already have great experience of agriculture, but the provision in any case applies to

trainees changing from a 'vocational training scheme' to an agricultural training scheme. These trainees are exempted from part of the teaching as they have already received a corresponding qualification.

Order no. 146 (Section 6) thus provides that:

- those who have completed the second period at school in the agricultural training scheme in accordance with the law on 'vocational training schemes' may be exempted from the first two school modules of the basic training,

- trainees with upper-secondary school (gymnasium) education or a 'vocational training scheme' relevant to agriculture may be exempted from the first school module of the basic training **and** from six months of work experience,

- 'trainees who can provide evidence of theoretical or practical experience which is relevant to the agricultural profession may be exempted by the Agricultural Training Council ... from parts of the basic training'.

The principal conditions for admission to the **add-on training schemes** within agriculture are:

- certificate of training as a skilled farmer, or

- completed training as agricultural assistant (which is a 'vocational training scheme'),

- several months of training or vocational experience in agriculture,

- a number of supplementary provisions which are specific to the type of add-on training chosen: farm manager, expanded farm manager or agricultural economist training scheme.

Organisation of the training schemes:

Flexible requirements to be met by the students:

As in the basic skilled farmer training scheme, the **Agricultural Training Council** can exempt students 'who can provide evidence of theoretical or practical experience in agriculture' from parts of the add-on training (Order 147, Section 5)

Both the basic and add-on training schemes are **two-part training on a full-time basis**.

Order 146 contains the following stipulations on the places of training:

'The basic training in agriculture can be given at vocational schools and other schools, institutions and firms which are approved for the purpose, and in work experience firms' (Section 1). The add-on training is given 'at vocational schools and other schools, institutions and firms approved for the purpose' (Order 147, Section 1).

The basic training 'lasts for three years and six months and must be completed in a maximum period of eight years' (Order 146, Section 4). The school instruction lasts for a total of 48 weeks and alternates with periods of work experience. The basic training thus has a modular division into modules I and II.

In module I the trainee has two options: starting the basic training with a period of work experience or a period at school. If training is started with work experience, the trainee's module I is made up of two periods of work experience and two periods at school, as follows:

- 1st work experience: ½ year
- 1st school module: 2 months
- 2nd work experience: ½ year
- 2nd school module: 4 months

If the basic training starts with a period at school, this is identical to

the 1st school module as mentioned above, but there is only one work experience period lasting for a total of one year.

Module II consists of a long work experience period of 1½ years and concludes with a six-month period at school.

Structure and flexibility of the qualification:

The school instruction in compulsory subjects lasts for a total of 44 weeks and in optional subjects for a total of 4 weeks. The compulsory subject areas are: domestic animals, plants, agricultural engineering, economics, general subjects (ergonomics, social and working conditions, spoken and written Danish). With regard to the compulsory subjects, the Act stipulates: 'The compulsory subjects in the school curriculum must be suitable for giving the trainee together with the work experience general and specific competence in the agricultural profession and promoting personal development, contributing towards further and continuing training and providing an understanding of society and its development' (Section 11 of the Act - my underlining).

The Order stipulates as follows on the work experience training: 'The work experience training in Module I is given in agricultural businesses approved for the purpose by the Agricultural Training Council' (Section 15). The practical training within the basic training 'lasts 2½ years and must be divided between at least two work experience firms' (Order 146, Section 12); however, the individual work experience period may not last longer than 1½ years.

'The work experience training and school instruction must be arranged so that the school instruction and work experience training complement each other in an appropriate manner and constitute a coherent progression.' (Order 146, Section 15 third paragraph)

The Law also provides an opportunity for the teaching to be adapted to weak trainees: 'Trainees who need it are given special instruction and other special educational assistance' (Section 13 of the Law). The add-on training schemes take place as a continuation of the initial training,

mainly as theoretical instruction at 'vocational schools' approved for the purpose.

Farm manager training lasts 4 months, expanded farm manager training 5 months and agricultural economist training 17 months.

Qualification achieved:

The basic training as skilled farmer passes on **vocational training competence** as a farmer - but not as **independent** farmer. It also provides competence to continue with **add-on training schemes for farmers** or with an **agricultural engineer training scheme**.

Training certificate:

On completion of the initial training, the school must issue a certificate of training to the trainee, if the following conditions are met:

- the average of the examination and general proficiency marks awarded is at least 6,

- the trainee has acquired a driving licence for tractors and a spraying certificate in accordance with the Ministry of the Environment regulations on professional users of pesticides.

At the end of an add-on training scheme, the school must issue a certificate of training if the following conditions are met:

For **farm manager training:**
The school issues a 'green certificate' if the average of the general proficiency marks and the mark for the written major assignment is at least 6 (on a 13-point scale).

For **expanded farm manager training:**
The school issues a 'green diploma' if the average of the marks in seven subject areas and the mark for the written project is at least 6 (on a 13-point scale).

For **agricultural economist training:**

The school issues an examination certificate if the average of examination marks is at least 6 on a 13-point scale. In calculating the average, the detailed marks in the individual subjects are weighted according to specified rules. The candidate must also have passed an examination as skilled farmer (basic agricultural training).

Completed add-on training in agriculture gives **vocational training competence** as **independent farmer and for exercise of the profession at an advanced level** corresponding to the respective add-on training scheme.

3 The Basic Social and Health Training Schemes (SOS training schemes)

These are a new creation within the public training system in Denmark. The training schemes are divided into three levels with mutually related conditions for admission:

The basic SOS training schemes consist of two levels:
- initial training
- add-on training

In addition to these two levels, there is an **entry year** for those taking part who are **under the age of eighteen and have only attended nine years of primary and lower-secondary school (folkeskole).**

Admission to the training schemes:

Both **young people under the age of eighteen and adults** have the right of admission to the training schemes. Admission to the initial training can only be granted via an **employment contract** between the trainee and a **Danish municipality**. Trainees who have only completed the ninth class of primary and lower-secondary school and are under the age of eighteen have to go through the entry year prior to the initial training.

The conditions for admission to the initial training scheme are:

- a completed entry year or
- minimum one year of other training or
- minimum one year of employment after ninth class or
- other relevant experience corresponding to the last two of these conditions.

Conditions for access to the add-on training scheme:

- pass in basic training or
- 'relevant qualifications based on either training or work experience or
- a combination of these with a duration of at least one year (law no. 422 of 13 June 1990, section 8)

Organisation of the training scheme:

These are two-part training schemes with full-time instruction: periods of school instruction alternate with work experience periods at relevant municipal places of work. The Order requires that the training of each individual trainee must take place according to a **training plan fixed beforehand.**

Duration of the training schemes:

Entry year:	1 year
Initial training:	1 year
Add-on training:	1 ½ years.

A requirement for all levels is that the work experience element in total must constitute 2/3 of each level.

General structure and flexibility:

Training in the entry year must be coordinated with the basic training. The instruction given in the entry year consists of compulsory subjects and optional subjects preparing for examination. The compulsory subjects include:

- communication topics
- health topics
- social and sociological topics

The practical element consists of periods or **days** of work experience within the course of instruction, but must altogether make up two-thirds of the entry year.

Initial training:

This 'contains school instruction and practical training in assistance, attendance and care in relation to people with a need for practical personal assistance, activation and elementary nursing there where the

users live (Order no. 799, section 4). The school instruction consists of compulsory area subjects and optional subjects in preparation for examination. The compulsory subjects consist of the following groups, each of which account for 20% of teaching time:

- a cultural and activity group of subjects
- an educational/psychological group of subjects
- a social and sociological group of subjects
- a nursing group of subjects.

'The work experience part consists of longer courses covering the areas of practical and personal assistance, activation and elementary nursing tasks (same Order, section 7).

Add-on training:

This is also two-part training, but with compulsory school subjects. Instruction is given in the following subject groups with a varying proportion of the total teaching time:

- work organisation (10%)
- social and sociological subjects (10%)
- cultural and activity subjects (10%)
- educational/psychological subjects (15%)
- medical subjects (25%)
- nursing (30%)

Flexibility in training: trainees with relevant training and employment backgrounds are to be exempted from parts of the training.

Competence achieved:

Completing the entry year does not give any vocational training competence but does give the competence to start basic training in SOS. Completed basic training provides the trainee with the competence to **perform elementary assistance, nursing and care tasks** - but only within the **area of the primary municipalities**. Those who have been trained have the **title of**

social and health helper. In addition, completed basic training gives the trainee the competence with which to start the add-on training.

Completed add-on training provides the competence to **perform basic** assistance, nursing and care tasks **throughout the social and health sectors** with the title of **social and health assistant**. It also provides the trainee with the competence to **continue** with what is - in relation to the SOS training scheme - **advanced training** within the **general (State)** social and health training schemes, e.g. as health visitor, occupational therapist or physiotherapist etc.

II Training schemes providing vocational qualifications for adults

Training schemes under the direction of the Ministry of Labour (employment training schemes)

1 Semi-skilled worker training

Admission:

Under the law on employment training schemes, everyone who is over the age of eighteen and has or is seeking employment as a semi-skilled worker within the industrial sector covered by the course has the right of admission. People who have or are seeking employment as public servants also have the right of admission to courses under this training scheme if they are to be able to carry out the work duties of semi-skilled workers.

No formal requirements are laid down **in relation to school background**, but applicants for a particular course must comply with the conditions that apply to this course (e.g. have completed a basic or previous course in the same series of courses). There are thus well defined admission requirements for the various semi-skilled worker training schemes. In addition, applicants who have a job must be able to have time off from the job for the period of the course.

Generally, however, admission may be restricted because courses can be oversubscribed.

Flexibility concerning admission criteria:

Trainee-differentiated workshop instruction has been introduced on a trial basis **within the same team** under the designation of **'open workshop'**: instruction is given to trainees who have started the course at a **different** level of qualification **in the same team** and the individual trainee is given the qualification necessary for **all the trainees** in the team to be able to achieve the training objective of the course concerned.

Organisation of semi-skilled worker training courses:

Most courses are weekly courses held in daytime. Semi-skilled worker training schemes are series of courses with a **modular structure** consisting of several weeks of courses. However, a few courses providing general or broad qualifications occur which can be attended separately. Under special circumstances daily courses can be divided into what are known as split courses.

The trainees are physically tied to the place of instruction. There is no self-study. There is normally no distance teaching in these training schemes, although this is used on an **experimental basis**.

Structure and flexibility of the qualification:

The average length of course is around 1.6 weeks. Unless individual courses are involved, the training schemes consist of well defined series of modules starting with basic courses and continuing with advanced modules each lasting one week.

Within several industrial sectors (e.g. building and construction, plastics industry, the butchery sector), there are composite training schemes as **two-part training**. Each of these schemes lasts **approximately 2 years** and takes the participants through **to an examination of apprenticeship and a vocational training qualification** with **a certificate of apprenticeship**. Within the butchery sector, for example, various semi-skilled worker training schemes as two-part training can lead to an **examination of apprenciceship** as shop butcher, industrial butcher or sausage-maker.

Opportunities for transfer:

There are opportunities for transfer from certain of these long semi-skilled worker training schemes to some 'vocational training schemes'. If someone has for example completed semi-skilled worker training in the timber industry and then starts on a 'vocational training scheme' in the timber industry, this can be completed in a shortened time because of the qualification already acquired in the semi-skilled worker training scheme.

Qualification achieved:

A written certificate of attendance for the individual module is obtained when the trainee has attended 'with satisfactory results'. The teacher on the course decides whether this is the case. A written certificate is also obtained for participation in a series of courses or a semi-skilled worker training scheme (as mentioned above). For courses in areas where **requirements are set by authorities**, **certificates** are obtained for acquired special competence (e.g. courses in driving fork-lift trucks, heavy goods vehicles, welding courses).

2 **Further training of skilled workers**

Admission:

Skilled persons who have or are seeking employment in the labour market have the right of admission. This also applies to public employees, provided their duties can be equated to the duties of equivalent skilled workers in the private labour market.

In most cases it is required that the applicant has completed a 'vocational training' course.

Flexibility:

Persons **without** 'vocational training' also have right of admission if they in some other way have achieved equivalent specialist qualification, in other words non-skilled persons **may** have the right of admission to the continuing training for skilled workers. Nationally, they accounted for 8.4% of participants in 1991. Whether and to what extent non-skilled persons take part is decided by the **trade further training committees**. There are wide differences between the different sectors with respect to such decisions.

The unemployed and people in employment are accepted. How high a proportion of unemployed is allowed in this continuing training depends on the specific circumstances of the sector and varies widely between sectors.

Organisation of training:

These are primarily full-time courses in normal working hours. The average length of course is 1.1 weeks. The training schemes consists of series of courses with a **modular structure**. Under special circumstances the courses can be split (known as split courses).

Structure and flexibility of qualification:

Most courses are held at vocational schools. The remaining courses are held at AMU (employment training) centres, technological institutes and FORCE institutes.

The training schemes are not normally two-part training, but two-part training can occur de facto in that the respective trade further training committee may decide that mutually related courses should be organised with periods of work experience in firms.

Qualification achieved:

The participants have their vocational training qualification updated in accordance with technological and occupational development in their subjects. Course certificates of attendance are issued. In subject areas with **requirements laid down by authorities**, a **certificate** of attained vocational qualification is obtained after a test has been passed.

3 **Further training of persons with youth training giving vocational competence (foremen, laboratory assistants, technical assistants etc.)**

(Sources for the following quotations: Order no. 461 of 11 July 1986 on employment training for persons with youth training giving vocational competence etc. - It will become clear below that the designation 'etc.' must be retained.

Admission:

Various groups of people with widely differing training backgrounds and experience of work have the right of admission to this continuing training programme:

- persons with technical 'vocational training', i.e. with technical

vocational training competence (approx. 4 years of training)

- foremen of semi-skilled and skilled workers etc.

- public-sector employees and persons seeking public-sector employment, if they have to perform duties corresponding to these training schemes,

- semi-skilled workers (persons who have completed a semi-skilled worker training scheme)

- skilled workers (this category overlaps the above)

- the self-employed (regardless of their training)

and two other groups of persons whose admission to this programme underlines the importance of 'etc.' in the designation:

- persons who on the basis of requirements in other legislation need training which cannot be achieved in any other way' (this could for example mean rehabilitating persons), and

- 'in special cases also other persons' (Section 7 of the Order)

This Order also stipulates quite generally: Admission to this programme 'must not be excluded because of prior training' (Section 11)

Organisation of the courses:

This continuing training consists of weekly courses with a **modular structure** with full-time instruction within normal working hours. They normally take place in daytime. The Labour Market Board may, however, give approval for courses to be held on a part-time basis or outside of daytime.

Contents of course:

Instruction with general coverage is given within a number of subject areas. The courses are job-oriented with both theoretical and practical

contents.

Competence achieved:

Each course gives independent competence of occupational relevance, but not vocational training qualifications. The Ministerial Order stipulates that: 'Trainees who have completed the training with satisfactory results may receive a course certificate. The certificate shall provide comprehensive expression of the training given.' No further details are given of the qualification achieved or the performance of participants in connection with the courses.

Training schemes for adults under the direction of the Ministry of Education

1 Training schemes under the 'Law on open education'

As discussed in section 1, this form of public training covers several of the other training programmes in that it runs across them and draws on their resources. Open education comprises universities and university centres, vocational schools etc.

The purpose of open education is 'to promote a broad provision of vocationally oriented competence-giving part-time training schemes and individual subject courses for the adult population.' (Law on open education, preamble)

Admission:

Within the framework of existing laws and orders, the training institutions themselves decide what admission criteria are to apply to the activities they offer as open education.

The admission conditions for acceptance for open education follow the rules in the training orders of the Ministry of Education **for the types of training concerned.** 'The institution shall administer the conditions for admission, so that to the greatest possible extent **account is taken of the**

real qualifications which adult applicants have acquired in their working lives or in some other way' (Order no. 795 on open education, Section 12 first paragraph)

There are also limits to admission: '...with consideration to the specialised background necessary to be able to complete the course in question (same Order, Section 12, second paragraph), but: 'No requirements with respect to a **particular age** may be set as a condition of admission (Section 12, third paragraph).

Participation in open education must be wholly or partly paid for by the users. Access is thus partly governed by a market mechanism. Open education courses are also often held **outside normal working hours**, in other words in the leisure time of most people. There can thus be said to be a practical restriction on admission.

There is a right of admission to open education for **private study**.

Organisation of open education schemes:

Open education schemes are normally part-time. They may have a modular structure, so that the participant himself can decide how many modules he wishes to take per year or semester. Individual subject courses are also offered.

Open education schemes also provide the opportunity for **self-study**, and those undertaking self-study are ensured rights of testing and examination. Open education can also be offered as **distance teaching**.

Where open education schemes are to be eligible for grants via state funds, the Ministry of Education must have approved them. Approval is normally conditional upon it being possible for the training to be followed by **persons in full-time employment**, i.e. **outside of** normal working hours. However, the Minister may grant exemptions from this requirement. This means that several potential participants are nevertheless cut off from participation in these schemes.

Training institutions may offer non-approved training schemes and parts of their own full-time training schemes as an extra source of revenue for the institution (activity cover by revenue).

Structure and flexibility of open education:

The progression of qualifications for participation in open education schemes is largely left to the participants' own choice, since several courses and part-time training schemes can be combined, almost solely limited by time, the students' own economic situation and geographical circumstances.

There are **transfer options** between different part-time training schemes. Several training schemes under open education for example have a set of basic modules which is common to all subsequent directions of training. This applies for example to the 'merkonom' (business economist) and 'teknonom' (technologist) training schemes.

In addition, **credits** can be given for passes in part-time training courses and single-subject courses when the participant is later admitted to a corresponding full-time training scheme. This means that it is possible to attend parts of a full-time training scheme **before** starting on the same training scheme on a **full-time basis** - without any loss of time.

Open training schemes contribute to a substantial extent to supplementary vocational qualification of many persons in the Danish labour market. To some extent these are **complementary vocational training qualifications**, i.e. continuing training. Open education thus makes a major contribution towards the opportunities for mobility in the labour market.

Qualifications achieved:

The qualification achieved varies substantially depending on what training is involved, at what level of specialisation and of what duration.

Some Ministerial provisions apply with regard to qualification via open education:

- the institution at which open education has been completed issues **documentation for it** (examination certificate)

- the certificate 'shall contain results of tests taken, a description of the training and it shall indicate any designation which the training or course gives the right to use' (Order 795, Section 8)

- if all the examinations which form part of a training scheme have been passed, the trainee has the right to **an overall certificate for the whole training scheme**

- credits are given for part-time training schemes and single-subject courses that have been passed after admission to relevant full-time training.' (Section 10).

2 **Advanced technician training schemes**

There are two levels of training here: advanced technician training and designer training.

Admission:

Three groups of persons with vocational training competence have right of admission. Persons

- who have passed a technical 'vocational training scheme'

- who in addition have already completed an advanced technician training scheme and who wish to start on a **designer training scheme**

- persons who have passed the university entrance examination or higher technical examination (HTX). However, admission with the latter examinations is conditional upon one year of relevant vocational work experience.

Organisation of the training schemes:

The training generally lasts for one to two years as full-time instruction. It is offered by approved vocational schools. However, these may 'wholly or partially transfer the teaching to other private or public institutions for firms' (Order no. 370 pursuant to the Law on Advanced Technician Training Schemes etc., Section 8 second paragraph)

Progression of qualification and flexibility:

The training schemes are both theoretical and practically oriented. Instruction is given in technical, workshop and laboratory subjects and in **general subjects**. 'Technician training within an area normally starts with instruction which is common to the training schemes of the area' (Order no. 370, Section 6). 'The training at designer level may include both subjects aimed at a higher technical level and subjects aimed at in-depth specialisation' (same Order, Section 4, second paragraph). In both training schemes 'instruction in optional subjects may be included, among these being subjects specially adapted with a view to **meeting local needs**' (Section 4, third paragraph).

Intended flexibility in these training schemes is thus also aimed at adapting to **local needs** and circumstances in the local labour market.

Another aspect concerning flexibility: the Ministry of Education 'can establish rules on special instruction or other special educational assistance' (Section 5, second paragraph)

Qualification achieved:

These training schemes do not lead to new or comprehensive vocational training competence at the **formal level**. However, they provide opportunities for vocational employment which corresponds to the new level of vocational competence, at an intermediate technical level just below the level of engineer.

3 Market economist training

This training scheme is new. It was implemented in 1990 and has a rapidly

rising number of applicants.

Admission to the training scheme:

Upper secondary school education (university entrance examination or HF, HH or HTX) give the right of admission. The school (commercial school) may, however, approve other examinations which give equivalent qualifications. The school makes an individual assessment of the qualifications of the applicants on the basis of their written applications. The best qualified are accepted if the number of applicants exceeds the training places at the school.

Organisation of the training:

The training is full-time study over 27 months. It is divided into two semesters in the first year and three semesters in the remainder of the study.
In 1991 the training scheme was offered at 19 business schools spread across the country. It is planned to expand the provision of this training substantially in order to relieve the burden on the training schemes of the business colleges.

Structure and flexibility:

Instruction is given in the following subject areas:

- international marketing
- foreign languages and cultures
- business economics
- product organisation
- international economics
- business law
- statistics
- administrative systems.

The teaching is based partly on vocational practice and partly on application-oriented theory. Instruction is given in two foreign languages,

of which English is compulsory. The other language is optional. However, not all schools in this programme offer instruction in three foreign languages.

Depending on the background of the individual student, **supplementary instruction** is given in mathematics and in foreign languages.

Qualification achieved:

This new training scheme does not (yet) provide any formal vocational training qualification, but the Ministry of Education **equates** it with the first part of the business economics diploma studies (HD studies). The training thus qualifies the student for acceptance on the **second part** of the HD study at the commercial colleges, Odense University and Aalborg University Centre.

The training scheme qualifies the student for work with international businesses generally with respect to imports and exports of goods and services in Denmark and abroad. It is intended to qualify its students to have an overview of and plan projects from product development to sale on international markets.

4 Computer scientist training

Admission to the training scheme:

The admission requirement is upper secondary school education:

- university entrance examination,
- higher preparatory examination (HF)
- technical upper secondary school examination (HTX)
- higher commercial examination (HH)

or information science assistant examination.

However, right of admission is also given by a different training background if this in the judgment of the commercial school makes it possible for the applicant to complete the training with a full return in

the prescribed time.

Informally the training scheme also necessitates particular knowledge. The following knowledge is assumed in the teaching:

- knowledge of mathematics corresponding to level B
- knowledge of the economic management systems and transactions of firms.

Organisation of the training scheme:

This is full-time training, divided into five semesters. Each of the four semesters consists of three subjects. In the fifth semester the students prepare an examination project. No distance teaching is used. Private study can only occur to a limited extent and cannot replace participation in the instruction.

Structure of the training scheme:

In the first semester basic knowledge on computer science, techniques and information technology tools as well as organisational and economic topics in firms.

1st semester subjects:	Business science, program structure, machine architecture and operating systems,
2nd semester subjects:	Business systems, system development, data modelling
3rd semester subjects:	System development methods, programming method, data communication and resource sharing,
4th semester subjects:	Distributed systems, system integration and two optional subjects.
5th semester:	Project

Qualification achieved

The computer scientist training scheme does not provide **any formal** vocational training qualification which can be compared with the 'vocational training schemes', university courses etc. On the other hand, the training provides real qualifications for **vocational work** at a substantially higher level than data-processing assistant level.

On completion of the training including an approved project, the students receive a certificate of training.

5. **Business academy training schemes**

At present there are 23 different training schemes within this programme.

Admission:

Right of admission is given by upper secondary school education or 'vocational training' passed in the commercial and office area, possibly supplemented by tests in relevant individual subjects. It is additionally required that the applicant **himself** has obtained employment in a **training position** in a firm, and that this firm can be linked to the commercial school concerned via a cooperation agreement **(training agreement)**. Employment in a training position **ensures acceptance** at the commercial school for the school part of the training.

The individual commercial school can additionally stipulate requirements on

- previous relevant vocational employment
- knowledge of English, German and French corresponding to level III of the commercial schools.

Organisation of training schemes:

The training schemes last between one and three years as **two-part training**. A typical duration is two years. The training schemes are held at commercial schools spread across the country. There are differences with regard to the rhythm of alternation on the training schemes: some have theoretical periods (school periods) for several weeks, whilst others

alternate between days spent at school and work experience periods at intervals of a few days or with a fixed weekly rhythm.

Progression and flexibility:

Progression varies a great deal depending on the **specialisation** of the training scheme: there are a total of eighteen **specialisations** at present, the most commonly taught being: sales and finance, retail trade and exporting.

In the special subjects oriented towards exports and foreign countries, instruction is given for example in languages, international marketing, foreign trade, financial control etc. In the retail-trade training schemes instruction is given for example in sales, advertising, languages, law and consumer and staff relations.

During the work experience periods in the firm, the students are introduced to the various departments of the firm. The school can set tasks for the students during the work experience part of the training scheme as an element in the training scheme.

Qualification achieved:

The training schemes qualify students to plan and carry out major independent tasks within the technical specialisation. On completing the training, students may use the title of 'akademiøkonom' (academic economist). As employees they often hold posts with informal designations such as export assistant, export officer, but have opportunities for promotion to managerial positions in export and marketing.

The training schemes thus provide genuine competence for professional employment corresponding to the level of training. On the other hand, they do not provide competence in the formal sense. It appears somewhat unclear whether the vocational qualification achieved at present can be regarded as a vocational training qualification. Future developments will clarify whether this is so.

6 Further training of farmers

Admission:

The target group for this continuing training is farmers and their spouses. Persons who have reached their eighteenth birthday and are seeking employment in agriculture also have the right of admission. No admission requirements related to training differing from those for initial training as farmer are set, i.e. completion of the ninth year of primary and lower-secondary school.

Organisation of the training:

The training exclusively consists of courses which are generally provided on a **residential** basis. Virtually all the courses last for one week. Private study is not used, and normally neither is distance teaching.

Contents:

Courses cover all vocational subjects of relevance to agriculture.

Competence achieved:

The courses update and refresh the competence acquired in the agricultural training schemes to the modern level of training. This means that the courses also provide knowledge and skills which can prove beneficial to participants and which can therefore represent advanced training for those concerned. However, the courses do not provide any actual advanced training, nor increased vocational training competence - looked at in relation to the modern level of training for agriculture.

7 Further training under the Further Training Act (Law 271)

Admission:

Persons with the following qualifications and backgrounds have the right of admission:

- Persons with a vocational training qualification between 'vocational training' and long advanced training,

- Persons with differing vocational competence who have a **common need** for further training e.g. as a result of changes in labour organisation or technological changes in firms,

- self-employed persons who have not had a long period of advanced training, e.g. farmers and spouses working with them.

Another target group of the programme is private firms. However, employees in the public sector and the unemployed may also take part in the programme.

Organisation of the further training:

The programme is implemented in the form of courses and projects which are arranged and carried out **locally** in close cooperation between the **local** business community and training institutions.

There are **no formal** requirements for the form of organisation or the duration of the courses. They are often held as day courses, but **may** also take place at any time, e.g. at weekends. **Flexible** forms of courses may be used (distance teaching, on-the-job training etc.). The courses normally last 10-30 hours either in one block or divided between several short periods.

Progression of qualification and flexibility:

The progression of qualification in these courses is diverse in nature and level. The programme does not set any precise requirements in this respect. There are no ministerial regulations on this subject. In addition, there are many opportunities for transfer in relation to other training schemes and other types of progression in qualification. They are not formally stipulated.

Qualification achieved:

It will probably come as no surprise to learn that such an open training situation does **not** provide **formal** qualification. The courses provide qualifications of vocational relevance but **no merits** in relation to other training schemes.

8 The long-term advanced training schemes (at universities and other higher educational establishments)

Because this area is so complex, only the generally applicable conditions for admission and the flexibility in the study arrangements will be discussed below.

The diversity of conditions of admission within the long-term advanced training schemes is so complex that it would go far beyond the scope of this report to give a complete account of them. Only the set of conditions of admission which the Ministry of Education has introduced as a **common set of rules** for by far the majority of the long-term and medium-term training schemes in Denmark will therefore be discussed.

Admission to studies:

Admission to most long-term advanced training schemes and to a number of 'medium-term' training schemes in Denmark is **regulated centrally via two overall admission frameworks:**

- **the Quota System**
- **Coordinated Enrolment (KOT)**

These frameworks operate together - they do not replace one another. The two frameworks cover for example:

- all studies at universities and university centres
- all studies leading to the title of engineer (ingeniør) including degrees in engineering from a technical school (teknikum)
- all medical studies

- all economic studies at business colleges and their departments
- in addition the advanced training schemes for technicians (which are discussed in this report) and a number of other training schemes such as:
- teacher training, architecture and librarianship studies etc.

The quota system:

Potential students apply for admission to these training schemes within an officially notified quota for all places. The Ministry divides the total number of available study places for each individual type of training at each individual educational and training institution into **two quotas - quota 1 and quota 2**. It is possible to apply for admission under quota 1 **or quota 2** (not combined).

The quotas are **defined by the background of the applicants relevant to education and training**: applicants for quota 1 must have passed an **upper secondary-school examination** (gymnasial eksamen) or have completed an upper secondary-school induction courses for refugees (GIF).

Acceptance under quota 1 takes place on the basis of the applicant's **average mark** (quotient) in the upper secondary-school examination. Applicants are accepted according to **falling quotient** (the best are accepted first).

In addition, the upper secondary-school examination in special branches of upper secondary school or the higher preparatory examination with particular optional subjects is required. Applicants with the upper secondary-school examination who do not fulfil these special conditions can take supplementary courses in order to satisfy the admission requirements.

In applications for study places under **quota 2**, the examination quotient from the upper secondary-school examination does not have the decisive importance it has in quota 1. On the other hand, the applicants have to **satisfy one of the following qualification requirements**:

- upper secondary-school examination giving right of admission (as in

quota 1) but in addition qualifications which the educational institution judges to be relevant for the type of study in question,

- application **without** upper secondary-school examination **by exemption**: if the institution judges that the applicant has experience and knowledge which **qualifies** him or her to undergo the training.

- **international or foreign examination giving right of admission**

The applicants under quota 2 are dealt with **first** - they have to be submitted 3½ months **before** the deadline for quota 1 applications. This means that there is a chance for quota 2 to be fully used if there are qualified applicants.

Of the total of 38,000 places that were available in 1991 for new admissions on long and 'medium-length' educational programmes in Denmark, 21,000 places (=55%) were reserved for quota 2.

As mentioned above, acceptance under quota 2 takes place according to **falling examination quotient** in the upper secondary-school final examination. This applies to every course at each individual educational institution. But the quotient requirements **vary** both between the courses and - for the same course of study - between the institutions. It is possible to be accepted with a lower quotient at some places than at certain other places. However, a certain **minimum quotient** ('limit quotient') fixed beforehand is required in order to be accepted for a particular course of study at a particular institution. The limit quotient is forced upwards if there are significantly more applicants than places. A 'market mechanism' thus operates in the 'qualifying and qualifications market'.

However, applicants can ensure acceptance beforehand for a particular course of training if they satisfy the **guaranteed quotient** requirement.

'Stand-by' applications:

At the same time as applying for acceptance, it is possible to apply for a

'stand-by place' for a particular course, i.e. if an applicant is not accepted immediately, he or she can gain a place on a waiting list for acceptance later the same year. If the applicant is nevertheless not accepted because of applications from others with better qualifications, he or she is given a **promise** (but not a guarantee) of acceptance the following year.

The Ministry of Education has thus developed an ingenious system to make maximum use of the available places on long and 'medium-length' courses of study. The system is continuing to be developed.

Coordinated enrolment (KOT) is also used in conjunction with the quota system for these training courses:

Coordinated enrolment (KOT)

Since applicants cannot be sure of admission unless they fulfil the guaranteed quotient requirement, they can at the same time - on the same application form - seek acceptance on **several different** courses and/or **several different institutions** (the applicant can, however, only be accepted for one of them). The applicant has to **rank** the applications **in priority** according to his or her own preference. The principle is that the coordinating institution seeks to accept the applicants corresponding to their highest priority or the highest possible priority: applicants are only accepted for a lower-priority course or institution if it is not possible to accept them for a higher priority at the time of application.

The state education system in Denmark has thus acquired an administrative system for the allocation of applicants to courses which achieves **maximum utilisation of educational capacity.**

Flexibility with respect to choice of studies:

Flexibility with respect to choice of direction of study **during actual study** exists at two levels in particular:

a) after completion of **basic studies**

b) after completion of bachelor studies

re a): At several university centres the studies within the same group of subjects starts with **common basic training**. The actual specialised study does not start until the basic training has been completed. It is thus easier for the students to choose subjects or change subjects within the group of subjects. All studies at Roskilde University Centre for example start with **two years** of basic training which is common to a faculty, e.g. social sciences. It is then possible to choose a three-year course of study leading to the degree of 'cand.scient.soc.' or a one and a half year course in administration. In both options there are in turn several options for combining subjects. A similar situation applies to other areas of study such as natural sciences and humanistic studies.

Within the area of natural sciences at Århus University the students are accepted for one of nine different **induction courses**. Not until during the first year of study do the students choose the technical structure of their study. In a corresponding way, social-science studies at Aalborg University Centre begin with one-year basic training course common to all studies.

re b) Flexibility with respect to choice of studies and options for changing also exists at **bachelor level** with numerous options for the selection and combination of subjects if the studies are continued beyond the bachelor's degree. This applies to the universities and university centres in Denmark.

Training schemes under the direction of the Ministry of Industry (Maritime Training Schemes)

1 Training as ship's assistant

Admission:

All who have completed nine years of basic compulsory schooling have the right of admission to this training scheme. However, a minimum time spent at sea is laid down as an admission criterion for the training modules after the initial course.

Organisation:

It is a full-time training scheme with a **modular structure** at a maritime school and/or on a school ship and on merchant ships. During the training, the trainee is tied to the place of training (school or ship).

Structure:

The total school-based part of the training lasts a total of eight months, divided up into three modules. The training begins with a five-week basic course (module 1). The two later school modules last for fifteen and thirteen weeks. In order to be able to complete the training, a total period of eighteen months at sea is required in addition to the school attendance.

Qualifications achieved:

After the school-based part, before the eighteen-month period spent at sea has been completed, the trainee has qualified as 'non-able ship's assistant'. After the requirement of a period spent at sea has been fulfilled, the trainee has the vocational training qualification 'able ship's assistant' under the provisions of the Merchant Shipping Act. This qualifies the trainee for admission to navigator training schemes.

2 Navigator training schemes

This is a system of six lines of training. Some of them have levels of qualification within the individual training scheme. There are for example three different grades of training as master of a yacht and two grades of training as master of a fishing vessel.

Altogether, the navigator training schemes consists of six courses:

- master of yacht (three degrees)
- master of fishing vessel (3rd and 1st degree)
- master of coastal vessel
- master of home-trade vessel
- duty first mate
- ship's master

The training schemes are mutually related, both in technical content and with respect to admission to examinations. They partly take place at the same institutions and on the same ships. They are therefore dealt with together here.

Admission:

The conditions for access to the individual training schemes include particular minimum requirements for time spent at sea (how long the trainee has been sailing professionally e.g. as ship's assistant prior to applying for navigator training). These minimum requirements are laid down in the **Merchant Shipping Act** and vary considerably from one training scheme to another.

The right of admission to the examination for higher navigator training scheme is to some extent dependent on having already passed a lower level of navigator training (it is, for example, only possible to gain admission to the first-degree examination as master of a shipping vessel if the corresponding third-degree course has already been passed) etc.

The training scheme for duty first mate was not implemented until 1990.

Organisation of the training schemes:

These are full-time **two-part training schemes**. They are carried out at navigation and master schools and on exercise and school ships. Trainees are physically tied to the place of training.

Structure and flexibility of the qualification:

There are substantial differences between the extent of assignments and depth of learning on the individual training schemes. The requirements for the participants in the training schemes providing more qualification (e.g. first mate, ship's master) are considerably stricter. Differences in the stipulated period of study are for example:

training as master of coastal vessel: 6 months
training as master of home-trade vessel: 15 months
training as ship's master: 36 months

The assignment requirements are laid down according to the provisions of the international convention on the training of seafarers, on shipping and keeping watch etc.

Competence achieved:

All navigator training schemes provide vocational training qualifications. The vocational competence for the individual training scheme is laid down in the Merchant Shipping Act and in the Act on the Crewing of Danish Registered Ships.

3 Marine engineer training scheme

The account given of this training scheme is based on Maritime Board Order no. 599 of 7 October 1988 on the training of marine engineers. The quotations used come from this source.

Admission:

Different admission conditions are applied for each of the three years of training. Admission requirements for the first year of training:

a) A pass in the 'expanded final examination of primary and lower-secondary school in the subjects of Danish, arithmetic/mathematics, English and physics/chemistry with a mark not below 6 or with corresponding or higher school education' (Section 3) **and that the applicant has completed:**

b) Basic vocational training or apprentice training (a 'vocational training scheme') in subjects which are approved for the purposes of the Maritime Board, **or**

c) A 12-month course at the Mechanical Engineering Workshop School of min. 1,400 classes 'according to a training plan approved by the Maritime Board (Section 3, first paragraph).

An exemption **may** be given from the latter conditions. This is one of the few examples of the **State** and not the training institution approving private/individual qualifications.

The Maritime Board can allow admission to the first year of training for applicants who do not fulfil the above schooling conditions, if condition b) is met 'and the Maritime Board against the background of the results achieved in the leaving examination of primary and lower-secondary school judges that the applicant can complete the training in the normal time' (Section 3, second paragraph).

Admission to the **second year of training** is conditional upon a pass in the first-year test **and** compliance with the admission requirements for the first year of training. The participants can thus qualify to the required level during the course of the first year of training if they lack some qualifications.

Admission to the **third year of training** is conditional upon a pass in the

second-year test. The **State** can also recognise private/individual qualifications in this connection: 'The Maritime Board may under special circumstances give right of admission to instruction for the first, second and third year tests for applicants who **do not fulfil** the conditions laid down in Section 3 to 5 but who can demonstrate in some other way that they have acquired the necessary qualifications' (Section 6).

Organisation of the training:

The whole training scheme is day-school instruction and lasts for three years with approximately 1,200 lessons per year. The training scheme thus does not have a modular structure, but is built up from lessons. During instruction, trainees are physically tied to the navigation school. No distance teaching takes place.

Structure and flexibility of the training scheme:

The Order stipulates which generally qualifying and which specific subjects must be included in the individual years of training. It is also stipulated that the first-year training

- is supplemented with courses in practical fire-fighting and the use and operation of sea-rescue equipment,

- 'fulfils the requirements laid down in the international convention on the training of seafarers, on trade control and on the keeping of watch (STCW convention)...' (Section 7, third paragraph).

Qualifications achieved:

After passing the first-year test and if the practical training requirements are met as mentioned under conditions of admission, the trainee obtains the vocational training qualification of **ship's engineer** and can receive a certificate stating this. After the third year of training, the actual marine engineer examination is held. After the examination has been passed, the trainee holds the vocational training qualification of **marine engineer** and receives a certificate stating that

this is so.

Both levels of qualification (pass in first and third-year tests) are types of vocational competence giving formal vocational competence which is laid down in the Merchant Shipping Act and in the Act on the Crewing of Danish Registered Ships. Training as marine engineer (i.e. a pass in the third-year test) also satisfies the **theoretical** requirements for **authorisation** as laid down in the **Danish Electrical Installers Act**.

Section 3

Certification of qualifications

I Youth training schemes providing vocational qualifications

1 'Vocational training schemes'

Evaluation:

Continuous evaluation is made of the trainees in both the school and work experience parts. Evaluation criteria in the school part focus on knowledge giving general qualifications on vocationally relevant knowledge. The criteria in the work experience part are directed towards occupationally relevant skills combined with occupationally relevant knowledge.

For the first school period, a special Ministerial Order explicitly stipulates the continuous evaluation of the trainees.

For assessment, the Minister of Education, on the recommendation of the Vocational Training Council, establishes rules on **assessment plans** for 'vocational training schemes'. The assessment plans are separated for the school part and the practical training: 'Assessment of trainees during the course of training and examinations are organised for the individual training scheme on the basis of the assessment plan, ... for the subjects in the area and with regard to special subjects according to the stipulations of the occupational committee. The occupational committee's guidelines for any apprenticeship test ... form part of the assessment plan. The occupational committee can stipulate that the practical training is completed with an apprenticeship test which is held according to the guidelines laid down by the committee' (Law no. 211, 'Law on vocational training schemes' of 5 April 1989, Section 33, third and fourth paragraphs - my underlining)

It is thus the technical sector committee under which the 'vocational training scheme' concerned comes that decides whether an apprenticeship test is to be held as the end of the training scheme concerned, and if so

according to what **detailed** guidelines it is to be held.

The overriding guidelines for this procedure are laid down ministerially: Order no. 87 on 'vocational training courses' contains overriding guidelines with regard to the circumstances and conditions under which the occupational committees are to establish the detailed rules for the apprenticeship test.

Examinations:

The examination is controlled and established by the Ministry of Education and the relevant trade committee **jointly** with shared roles. Overall responsibility for examinations is shared accordingly.

Practical responsibility for holding the tests rests with the vocational schools in the case of the school element and the trade committee in the case of the apprenticeship test.

The tests are conducted locally. There is variation with regard to subjects and test questions, but there is standardisation with regard to the qualification requirements and the goals of the training scheme. Standardisation is relative in the sense that it can be changed over the course of time by the trade committee in line with technological and trade developments in the trade in question and in accordance with any changes in the training itself.

The school tests are held by the teachers in the school, whilst the apprenticeship test is held by the trade committee and **external examiners or 'inspecting masters'** are used, i.e. they do not come either from the school or from the work experience sites attended by the trainee.

2. Initial training as skilled farmer and add-on training schemes

Evaluation:

In connection with the instruction, the school undertakes continuous assessment of the trainees. It 'is to reflect whether the trainee's

proficiency is in accordance with aims for the individual subjects. The assessment is based on the solving of theoretical tasks, the assistance of trainees in and benefit from various practical tasks, and is undertaken continuously in all the subjects included in the training ...' (Ministerial Order no. 146, Section 18).

The school additionally undertakes at the end of the first training module a final assessment in the form of theoretical and practical tests which provide a guide.

Order no. 146 stipulates that the Danish 13-point scale is to be used for all assessments and specifies the content/level for each point on the scale.

Continuous assessments of student performance are similarly made in the add-on training schemes. At the end of the training, the student has to submit a large, independent, written dissertation (major assignment), the assessment of which is included in the final assessment on a par with the other examinations.

In the farm manager training scheme, the student has to defend his or her major assignment orally, and the other examination 'is carried out as a combination of an oral test and a project' (Order 147, Section 16).

Examinations:

In school module 2, examinations are held in all the compulsory subject areas. The trainee receives examination marks for each subject area. All the marks are transferred to the trainee's training certificate.

The tests that are included in the examination are performed as a project, oral, written and practical test or as a combination of these forms of test.

The individual school issues examination regulations which must be in accordance with the Ministry's stipulations on examinations for these training schemes under Order 146. Examination tasks are set by the

individual school. It can also establish whether oral examinations are be accessible to the public.

Order 146 stipulates that **external examiners** must assist in the examinations. These may be appointed by the school and/or by the Ministry of Education. The Order also stipulates as follows on examinations:

1) The trainee's teacher assists as examiner and must be present throughout the test.
2) The trainee may during the performance of assignments only accept help from the examiner.
3) The external examiner may in cooperation with the teacher ask the trainee questions during the test in connection with the task.
4) The external examiner must be present throughout the course of the test.' (Section 23, second paragraph).

At the end of the add-on training schemes, written and oral examinations are held with the involvement of external examiners. Examinations are decentralised, in that the school sets tasks and the examiners are teachers at the school.

External examiners assess the students' main tasks and assist in the assessment of the performance attained by the students in the individual subject areas.

In the expanded farm manager training scheme, written examinations are held with marks awarded in eight subject areas. The students must present an oral defence of their written dissertation and receive marks for oral and written performance.

In the agricultural economist training scheme, examinations are held in 22 individual subjects belonging to six different subject areas. Marks are awarded in each of these subjects. With regard to the awarding of marks, Ministerial Order 147 specifies a detailed **weighting between the subjects**. In addition, 'requirements may be made in the individual subjects for the submission of one or more projects. These must be approved before the student can be examined in the subject concerned.' (Order 147, Section 19 fourth paragraph)

3 The basic Social and Health training schemes

Evaluation

Entry year:
At the end of the entry year, the school undertakes an assessment of the individual trainee, to ascertain whether he or she is suitable for continued training and occupations in the social and health sectors. The assessment is made on the basis of assessments from work experience placements where the trainee has been in practice, and a guiding test in the compulsory school subjects.

The school issues a certificate to the trainee for the completed entry year. The certificate shows the results of the test that has been taken.

Initial and add-on training schemes:
Vocationally relevant knowledge and skills of relevance to the practical assistance, nursing and care work are used as evaluation criteria. The qualifications acquired through the training are to be documented through written, oral and combined oral and written tests.

Assessments of the proficiency of the trainees are made during the practical training. Compulsory practical tasks are also assessed. At the end of the training, theoretical tests are held - two tests in the initial training scheme and three tests in the add-on training scheme.

The Ministerial Order on the training schemes stipulates that the Danish 13-point scale must be used in assessments.

Examinations:

The content of examinations is controlled by the Ministry of Education which establishes and has responsibility for the level of qualifications in the training schemes. The tests are held locally. Questions in tests are set by the individual school. The Ministry specifies that tests may be internal or external: internal tests are assessed by an examiner and external examiner appointed by the **school**. External tests are assessed by

examiners and external examiners **appointed by the Ministry of Education.** The Ministry decides whether and when the tests must be internal or external. However, an external theoretical test is held at the end of the initial training and add-on training. The oral tests are public.

External examiners must not be attached to the school or work experience sites in the region.

II Training scheme providing vocational qualifications for adults

Training schemes under the direction of the Ministry of Labour

1 Semi-skilled worker training schemes

Evaluation:

Trainees are evaluated both in terms of skills and knowledge that is relevant in relation to the training aims of the course. For training schemes in some industries the trade committee which has developed the series of courses concerned lays down the evaluation criteria to be applied by the teacher. The information on this subject goes to the school together with the course description.

The course teacher assesses the progress achieved by the trainees on the course continuously or at regular intervals during the course, as the teacher has to ensure that the individual trainee acquires the necessary knowledge and skills and that he or she is achieving the course goals the sector committee has established. Depending on the course, these goals may be dominated more by knowledge or skills. They are generally a combination of knowledge and skills.

A final assessment is always made with regard to whether the individual trainee has attained the goals of the course - partly with a view to the issuing of course certificates to the participants. These assessments are made in most cases by the teachers on the course. However, in the long semi-skilled worker training schemes the final assessments are made together with an external examiner. This applies in any case to the semi-skilled worker training schemes which finish with an **apprenticeship test**.

Actual final tests are only held on a few courses. However, this is done for all courses which end with a **test leading to the award of a certificate**, e.g. fork-lift truck driving, welding courses and HGV driving.

Skills testing is used in the tests leading to the award of a certificate. Real or simulated work situations are tested (e.g. driving a loaded fork-

lift truck in a warehouse full of pallets of fragile goods).

Examinations:

The particular sector committees under whose direction the courses are held lays down the examination requirements. In the case of courses leading to the award of a certificate, however, the requirements are laid down by **authorities**. For example, in courses in HGV driving, it is the traffic police who stipulate the contents of the test and carry it out.

The tests are local with the exception of the welding tests. Tests take place at the end of some courses. The requirements are standardised in the case of tests leading to the award of a certificate.

It is generally the teacher on the course who conducts the test, although external **examiners** assist in tests leading to the award of a certificate. However, **welding tests** are completely **central tests**: the test welds of the trainees are sent anonymously to the Danish specialised institute for welding technology: the **Welding Centre**.

Another external examiner function is performed by the **police**: in HGV driving tests, it is the police motor-vehicle expert who conducts the test and assesses whether the person taking the test has passed or failed.

2 Further training of skilled workers

Evaluation:

An assessment is made of technical competence, skills and relevant knowledge in relation to the established training goals for each course.

Professional profiles as a reference framework for the assessment play a role as the participants are for the most part skilled workers and the further training takes place within the individual trades.

The trade further training committees of the individual sectors can stipulate beforehand via the course description they give to the training

institution that particular assessment criteria must be met by courses directed by the committee.

Assessment may be continuous throughout the course. The examination is held at the end of the courses, passing of which entitles the trainee to a certificate e.g. in the electrical installation or GVS sectors. In the case of some tests, all knowledge and skills relevant to the trade are included in the test requirements.

Examinations:

The respective trade further training committees have responsibility for examinations and establish the examination requirements. Examinations are held locally at the training institution (technical schools and business schools). The examination questions and detailed assignments vary, but the qualification requirements are standardised for each trade. In the long term, however, these are subject to change, as the further training committee adapts subjects and tests further developments in the subject. Examinations are conducted by teachers and by teacher and **external examiner** in the case of tests leading to the award of a certificate.

3 Further training of persons with youth training providing vocational qualifications

It is decided by the respective trade further training committee (with equal composition) what assessment is to be applied in connection with the further training courses which take place under the direction of the committee within this programme. No standards or general guidelines or norms have been established for this purpose. Examinations or tests are not normally conducted for these one-week courses. There are no standards or ministerial regulations relating to tests.

Training courses providing vocational qualifications for adults under the direction of the Ministry of Education

1 Instruction under the Open Education Act

Ministry of Education Order no. 795 on open education lays down the following rules on assessments and examinations (the following quotations are taken from this Order):

'Open education is completed with a test, evaluation or other form of assessments in which external examiners assist. Internal assessment or evidence of execution can replace parts of tests etc.' (Section 5)

The Ministry stipulates the evaluation criteria to be applied at a higher level: 'Student performance is assessed according to the rules on this point for the training schemes concerned' (Section 7).

The Law and the Order on open education additionally open up wide-range opportunities for **private study**. The opportunities of private students and the evaluation of their performance is regulated ministerially as follows: students who are <u>not</u> accepted for corresponding open education 'may as private students take tests or take part in other assessment in part-time training schemes and single-subject courses offered as open education' (Section 20, first paragraph), and also: 'the training institution <u>may</u> give approval for a private student to take a test on training schemes which have <u>not</u> been approved as open education. The rules ... on assessment and the issuing of certificates are applied accordingly for private students' (Section 20, third and fourth paragraphs, my underlining). And the Ministry gives further protection for the rights and opportunities of private students: 'the training institution where the test is to be held must <u>no later than three months before the test</u> ... give the private student information on the <u>technical goals and curriculum and whether the curriculum is approved</u>. The material must contain <u>a satisfactory description of the forms of test</u> (Section 22 - my underlining).

Examinations under open education are thus controlled formally and in terms of content by the Ministry of Education. Examinations are local, but are

conducted using external examiners.

2 Advanced technician training

Evaluation:

The evaluation criteria that are applied focus on theoretical and practically oriented knowledge relevant to the trade. The evaluation additionally comprises skills relevant to the trade with respect to application at the workplace. Evaluations at the skills level focus on the operation/handling of advanced equipment and instruments. There is no information on forms of evaluation.

Examinations:

Tests are held at the end of the training programmes. However, the law does not lay down any further details on this point and there are as yet no ministerial orders concerned with evaluation and examination on these training schemes.

3 Market economist training

Evaluation:

Relevant knowledge in the respective subject areas of the training scheme is evaluated. As language skills in this training scheme have to be distinctly application-oriented, foreign-language skills are evaluated. The study ends with a major assignment. There are no ministerial provisions (ministerial orders) at present on evaluation or examination. However, the evaluation level and examination requirements applied emerge through the market economist training forming an official part of the first part of the economic diploma studies (HD studies) at the business colleges etc.

4 Computer scientist training

Evaluation:

The evaluation criteria are relevant computer-science knowledge at the training level. An evaluation is also made later in the training and in the major assignment of students' ability to deal with and solve computer-science problems and their ability to make effective use of relevant methods and theories to solve a real and large computer-science task (in a firm).

There is an **oral examination** after each of the first four semesters. In the **major assignment** in the fifth semester the students have to work on a major specific assignment related to a firm, using task-related theories and methods.

Examinations:

The Ministry of Education and the vocational schools which offer computer-science training, at present numbering twelve, control examinations. The examinations are held locally at the vocational schools with the schools' teachers.

In view of the fact that the major assignment is specifically related to a firm, the examination requirements are not directly standardised, but specific technical qualification requirements are nevertheless laid down for examinations.

5 Business academy training schemes

Evaluation:

Knowledge of vocational relevance and particularly specialised relevance is evaluated both at school and in the firm. At the work experience firms an evaluation is made particularly of the capability of the students **at the workplace**, among other things with regard to planning, implementation and performance of mercantile tasks. **Work-based evaluations** are therefore made.

Examinations:

The training schemes are completed with an **oral and written examination.** These are state-controlled, i.e. an **external examiner** is used in the examinations. Examinations take place locally at the business school concerned.

6 Further training of farmers

No formal evaluations are made of the increase in the vocational competence of the participants or their performance as a result of the instruction.

Nor are tests or examinations normally held, as the courses under this programme do not provide increased or new vocational training competence or merit in connection with other training schemes.

7 Further training under Law 271

No **formal** evaluation of the skills of the participants or training results is made for the courses and other programme activities (projects and information activity). The evaluation focuses to a substantial extent on the administrative, economic and organisational aspects of the activities.

There are no formal evaluations of trainees on courses or testing of their skills.

8 The long advanced educational programmes

Evaluations:

In the case of the long advanced educational programmes at universities and higher educational establishments, evaluation criteria focusing on knowledge relevant to the specialisation and the ability to deal with technical or scientific questions and problems are mostly applied.

However, in some subject areas (e.g. health sciences), evaluations at the skills level are of decisive importance.

The criteria and forms of evaluation within the long training programmes are so diverse that it would go beyond the scope of this report to describe them at all systematically. Under a ministerial order, however, the Danish thirteen-point scale must be used for assessments at the universities and the higher educational establishments.

Examinations:

Many different of forms of examination and examination procedures are applied in the long training programmes. There are no detailed provisions or requirements applicable to all training programmes. A detailed account of this topic cannot be given in this report for reasons of space.

Training schemes under the direction of the Ministry of Industry:

Maritime training schemes

Ship's assistant training

Evaluation:

Evaluation criteria during the practical periods spent on board ships comprise practical competence and seamanship-related skills which will be largely identical to the competence and skills in the merchant navy at able seaman level. In the practical part of the instruction, a continuous evaluation is made of trainees on board ships.

Examinations:

Authority to establish the content and duration of instruction for all Danish maritime training schemes rests with the Ministry of Industry (Maritime Board). The same applies to authority to establish examination requirements and forms of examination.

Ministerially appointed **examination boards** conduct examinations for maritime training schemes. These boards examine on the basis of a state examination system established by the Maritime Board.

Ship's assistant training thus finishes with a state-controlled examination at the training institution conducted by a state examination board. Criteria for whether the training has been carried out with satisfactory results are laid down by the Maritime Board.

Navigator training schemes

Evaluation:

The evaluation criteria predominantly focus on the vocationally relevant level of competence and knowledge. The criteria are determined by professional profiles (e.g. fisheries, coastal shipping, the profession of

ship's master), but the competence related to the professional profiles has a hierarchical structure.: the more demanding professional profiles incorporate the less demanding ones.

Form of evaluation:
Continuous assessment of the trainees/candidates is employed in the practical period. Written and oral examinations are used at the end of the school period. The oral examinations are public.

Examinations:

The Maritime Board has overall responsibility for examinations and establishes examination requirements. Examinations are conducted by a **state examination board**. The board manages examinations and sets the assignments. Examinations are as a general rule conducted at the navigation and skipper schools. Examinations vary in relation to assignments, but are standardised with regard to examination requirements.

'The examination board consists of up to five members, who are appointed by the Minister of Industry. They must as a rule have passed the ship's master examination and have served as navigator on a merchant ship for at least two years. The Minister decides which of the members of the board shall be its chairman'
'The Minister of Industry may appoint external examiners to the necessary extent'
(Law no. 819 of 19 December 1989 on maritime training schemes, Section 7, third and fourth paragraphs)

Marine engineer training

Evaluation:

The evaluation criteria refer to specialist competence and knowledge relevant to application in relation to the profession. The evaluated knowledge relates to the prevention and solution of technical problems within the areas of the trade: the technical control and management functions at sea and on land. The evaluation criteria refer to a

professional profile.

Trainees are examined at the end of each of the three years of training. Examinations are **state-controlled**, written and oral. The oral examinations are public.

Examinations:

Overall responsibility for the whole training scheme including the examinations rests with the State (Maritime Board). Examinations are conducted by a state-appointed examination board at the navigation schools.

'The examination board devises the questions for the written tests and formulates the topics for the oral examinations' (Order no. 599 on the training of marine engineers, Section 11). The qualification requirements for examinations are standardised. However, there are variations in the questions and examination topics.

'The written tests are as far as possible assessed by the teacher who has given instruction in the subject concerned, and a member of the examination board or an external examiner appointed by the examination board' (Order no. 599, Section 13).

This Order gives exceptionally detailed instructions on:

- for which annual test marks are to awarded in which subjects
- what scale of marks is to be employed
- in what subjects there are oral and/or written tests
- what combinations of **minimum marks** must be achieved for particular groups of subjects - for each year of training - and for the whole training programme.

The oral examinations are assessed by examiners who have been the students' teachers in the subject and a member of the examination board or an external examiner appointed for the purpose by the board.

The marine engineer training scheme is thus a highly structured and

strictly regulated training programme with respect to admission requirements, training structure and rules of examination and assessment.

Section 4

Problems and development trends in relation to vocational qualifications in Denmark

Remarks concerning development of vocational skills

Experience in the Danish labour market - as with other labour markets - has unfortunately been that formal vocational qualifications and vocational training qualifications do not necessarily ensure or even guarantee the individual tenure or employment. On the other hand, there are market circumstances such as the relationship between supply and demand of the relevant vocational qualifications which determine employment and unemployment.

There seems only to be limited sense in **exclusively** focusing on **formal** vocational qualifications. There is a need to find and cultivate new and stable employment opportunities in connection with the development of qualifications.

It has been found in Denmark that there are usable opportunities for the further development of vocational qualifications at an 'intermediate level' of starting qualifications. Analyses of the structure of the need for new or new modifications of vocational qualifications point to such 'niches'.

On this basis, new training schemes have been devised for those with a significant 'starting qualification' (e.g. high-school educational programmes or some technical 'vocational training schemes'). This has led to the implementation of new 'intermediate training schemes' looked at from the point of view of qualification which cannot yet be said to be 'well established' or formal vocational training qualifications. But they give the newly trained gainful employment corresponding to their level of training. We are referring here to new training schemes in Denmark such as:

- the computer-scientist training scheme
- the market economist training scheme
- the business academy training scheme

The further development of these and similar training schemes and the market conditions in relation to their application will show whether they will later acquire the character of vocational training qualifications.

Reorganisation of the structure of teaching methods in the 'labour-market training schemes' (management by objectives and framework)

A decision has been made within the 'labour-market training schemes' at ministerial and Board level and in the committee structure to introduce **management by objectives and limitations.**

The present educational system stipulates to the teacher the limitations on instruction with a high degree of detail for each class. And the teacher is obliged to follow the stipulations - they are not a guide for the teacher.

This principle can be termed 'educational user instructions'. It make possible high productivity (expressed in hours performed and number of course weeks) - with a risk of low creativity in the instruction and low commitment and involvement of participants and thus inadequate utilisation of the learning opportunities and teaching resources.

This traditional system is to be replaced by management by objectives and limitations which is based on **action-oriented objectives** for the teaching - combined with particular realistic limitations for the individual training scheme (e.g. available time, number of participants, which and how many rooms, tools etc.)

On this basis it is the teacher's responsibility in cooperation with the participants and within the stated limitations to achieve the training objective described in the framework of the curriculum. Within the given limitations, the teacher himself can choose which teaching method to apply.

As a result of this change of principle, the whole system for describing AMU training schemes and the individual courses has been changed. The teacher is supported in this change-over by practical and educational guidance with examples of appropriate teaching methods for the training schemes concerned, but the teacher does not need to follow them. However,

they can form part of the teacher's decision-making basis in relation to the planning, modification and execution of teaching and the realisation of training objectives.

This change in the educational structure of the AMU training schemes has a parallel in the 'reform of vocational training' at the technical schools under the direction of the Ministry of Education, where instruction differentiated according to trainees is given depending on the trainees' qualifications, with optional subjects as supporting functions for learning etc.

Coordination of training schemes providing vocational qualifications and vocationally oriented training schemes under the direction of the two ministries:

It will have become clear from this report that the interaction between the training systems of the different ministries is not particularly marked or well developed. An **interdepartmental committee (TMU)** chaired by the head of department (state secretary) in the Ministry of Labour about six months ago undertook a complete investigation of the whole problem area. Representatives of the main labour-market organisations, five ministries and the Danish primary local authorities and county authorities sat on the committee.

The **terms of reference** of the committee were 'to shed light on the opportunities for improved utilisation of the total adult and further education resources offered to the unemployed, wage-earners and firms. The effort encompasses both direct **vocationally oriented adult and further education** and further education providing **general qualifications**.' (Report no. 1234 on the coordination of vocationally oriented adult and further education, May 1992, page 8) (The Danish expression 'adult and further education' is to be understood as meaning initial and further training for adults.) The committee presented the results of its work to the Minister of Labour. They were published as the above-mentioned report in May 1992.

The TMU analysed the interaction between the different state vocational training systems at the **local, regional and central levels.**

The TMU points to:

- a need to change the **advisory structure** in relation to training schemes (advice is at present dominated by the sectors, i.e. whether one ir skilled or 'unskilled'),

- better opportunities for being able to obtain **merits across the training schemes**,

- 'the need to establish a targeted link between **vocational policy and labour-market and training policy**' (page 156)

In addition, the TMU draws attention to the following development trends within the total vocational training system:

There is a risk that **ejection mechanisms** may make themselves felt even within the system, because the individual employees have to both acquire the relevant vocational qualifications and retain or update them. In addition they have to be 'able continuously to achieve capability in and adapt to new work tasks' (page 156)

The TMU goes on to emphasise that qualification requirements should be laid down for employees which as well as job-specific requirements also include **broad, general qualifications** and **personal characteristics**: 'the changed qualifications .. point to the need to utilise the relevant parts of ... the provision of training yielding general qualifications ...' (page 157).

The committee summarises its analysis in five main problems:

- many **overlapping** training systems
- **lack of overview over** and information on the different training provisions
- economic circumstances
- the content and arrangement etc. of the training systems
- **problems of interplay between general and vocationally oriented** adult and further education.

The TMU points out in more depth that:

- the various training systems lack opportunities 'for sufficient interaction',
- overlapping occurs between areas of training and there may be areas which are not covered by training' (page 159),
- 'it is difficult to obtain coherent training processes, including the transfer of merits',
- 'finally there is a lack of coordination and increased community on development work, use of equipment, quality assurance and teacher training and development' (page 159)

The committee ends its investigation of the problem by noting 'the lack of an overview of and the lack of information on the many training provisions'.

On the basis of this investigation of the problems, the committee has drawn up a set of in-depth and detailed proposals for solutions which substantially **alter the structure of the total vocational training system:**

The main points of this modification programme are as follows:

- harmonisation of legislation on 'adult and further education' within the Ministries of Education and Labour

- coordination of central control. The TMU felt, however, that the two central COUNCILS should be retained - (we shall later see that this opinion cannot be shared). But in addition, the committee structure in the training systems of the two ministries must be greatly simplified: the existing committee structure must be replaced by **vocational area committees within the five to ten major areas of employment** (sector groups).

- coordination of the local and regional structures in the training systems: 'A **coordinated structure** for the training **and labour-market effort** is built up around two main elements:

1) **school cooperation** which involves the schools involved in adult and further education in a local area and

2) a **regional labour market** which attends to the labour-market policy effort in the region and is to assist towards knowledge being passed on between the needs of the labour market for labour and training opportunities in the region' (pages 183+184)

The committee additionally proposes structural changes in relation to three aspects in the area of training:

- cooperation between training providing vocational qualifications and adult education providing general qualifications,

- with regard to the 'labour-market training schemes' a reform of the financial control so that the political control of training schemes consists in 'the distribution of grants and the establishment of corresponding activity and productivity requirements between programmes and training' (page 191)

- the bodies which have received grants have to purchase training in the schools. These bodies are:

  - the new vocational area committees (as discussed above under the TMU proposals),
  - **regional labour-market councils**

- adaptation of the vocational training system providing **general qualifications** to this structural change is also advocated.

On the basis of this interdepartmental committee work, a wide-ranging revision of the structure of the training system providing vocational qualifications is in progress in the Ministries of Labour and Education and in the Labour Market Board. The intention is to change the structure so that the further training of skilled workers and the 'labour-market training schemes' can be carried out at **both** the AMU centres **and** the technical schools.

As proposed by the TMU, the whole council and committee structure is changed - even more than the committee had wanted. The trade committees in the AMU system and the trade further training committees are done away with and are replaced by a number of **vocational area committees**. Both the skilled and unskilled are to be represented on these committees. Each of these committees with bring together a number of sectors that belong together or are related These proposals follow the development in the labour market from trade unions to **cartels**.

As a logical consequence of these intentions, the two central councils are to be integrated into a council on which both the skilled and unskilled are represented.

The new vocational area committees have the authority to decide which semi-skilled worker and further training schemes are to take place in their areas. Each committee is provided with budget funds by the ministries under the Finance Act (the state budget) for the implementation of its decisions: the committee purchases training for **both the skilled and the unskilled** at the vocational schools and AMU centres which the committee decides to use for the purpose.

Opportunities for both competition and cooperation are thus created locally and regionally between AMU centres and technical schools.

The new structure has not been adopted but has the status of proposals which have to pass through a consultation process among the partners involved (that is to say the labour-market parties represented in the present council and committee system for the training schemes providing vocational qualifications - as described in Section 1 of this report.) It is planned that the new structure will be put into effect at the start of 1994.

This revision of the present decision-making and control structure for the training system requires a comprehensive harmonisation of the legislation in the area (as proposed by the interdepartmental committee). This means two programme or framework laws for 'vocational training schemes' and 'labour-market training schemes', supplemented by two institutional laws

for AMU centres and vocational schools (technical schools).

This complex of laws will be brought before the Folketing (Danish Parliament) for discussion in 1993 and is expected to come into effect at the beginning of 1994.

Revision of legislation concerning the control of universities and other institutions of higher education:

At the end of October 1992, the Minister of Education presented a new bill, for a 'Law on Universities etc.' (also known as the Universities Act). The Bill covers Danish universities and other institutions of higher education under the Ministry of Education. This is another revision of earlier legislation with two earlier revisions as recently as in 1987 and 1989. The Bill is expected to be passed and come into effect at the start of 1993.

The new law will mean a considerable tightening-up of the whole administrative structure of the institutions of higher education, starting with the powers and opportunities for intervention of the Minister and Principal via the management of the faculties or parts of institutions down to each individual institute within the institution.

The formal management structure of the institutions and their permanent staff gain greater powers in relation to the democratic management structure which includes the 'users' (the students).

The new law stipulates for example that the chairman of the study board at the individual institutes can only be chosen from among the **full-time scientific staff.**

Another new element is that the institutions of higher education are allowed to **receive finance from sources other than the state - without this automatically having to be offset** against the share of the financing borne by the state.

The new law is a framework law, so that the Minister has statutory authority to intervene in relation to the institutions of higher education

"if special circumstances arise". However, it is not defined in the wording of the law or elsewhere what is understood by 'special circumstances', i.e. the Minister is given a free hand in interpreting this statutory provision - something which from the legal and governing policy points of view can be regarded as a 'special circumstance'.

References

Labour Market Board	:	1991 Annual Report
" " "	:	Uddannelse af specialarbejdere. Statistik 1991, June 1992
" " "	:	Efteruddannelse af faglærte. Statistik 1991, June 1992
" " "	:	Efteruddannelse af arbejdsledere, laboranter, tekniske assistenter m.fl. Statistik 1991, June 1992
Copenhagen University	:	Studier ved Københavns Universitet 1992. En studiehåndbog, 1991
Nielsen, Søren P. (State Vocational Teacher Training)	:	Erhvervsuddannelsessystemet i Danmark. Draft report to CEDEFOP, undated
Nøgleforlaget ApS	:	Uddannelsesnøglen '92, 20. årgang, 1991
Council for Training and Vocational Guidance (RUE)	:	Erhvervsuddannelser efter 9. og 10. klasse, 1991-92, 1991
	:	Erhvervsuddannelser efter 9. og 10. klasse, 1992-93, 1992
	:	Videregående Erhvervsuddannelser, 1990

	:	Studie- og Erhvervsvalget, speciel del, 1991-92, 1991
State Information Service (SI)	:	Betænkning nr. 1234 om samordning af den erhvervsrettede voksen- og efteruddannelsesindsats, May 1992
Ministry of Education	:	U 91. Det nye mønster i dansk uddannelses- og forskningspolitik. 1990
Ministry of Education and Research, Vocational Training Directorate	:	Find Paragrafferne. March 1990
Various laws and ministerial orders - as specified in the text of the report - from	:	- Ministry of Labour - Ministry of Education and Research - Ministry of Industry

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In these publications the authors, after making brief reference to the characteristics of the general and vocational training systems in their countries, describe all aspects of how qualifications are certified:

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